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CREDIT CARD INTERCHANGE FEES: THREE DECADES OF ANTITRUST UNCERTAINTY

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INTRODUCTION

In 2007, retail merchants in the United States (“U.S.”) will pay the banks issuing Visa and MasterCard payment cards¹ more than \$30 billion in *collectively set* per transaction interchange fees.² Antitrust laws generally

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¹ The term “payment card” encompasses four distinct types of cards that may be used to pay for goods and services: (1) credit cards that permit card holders to pay for charges in monthly installments plus interest; (2) charge cards that require cardholders to pay off their entire balance monthly; (3) debit cards that may be used only if the cardholder has a balance in a deposit account from which the charge is automatically deducted soon after the purchase; and (4) prepaid cards in which the cardholder pays money in advance that is deducted directly from his account when the card is used. *See* United States v. Visa U.S.A., Inc., 163 F. Supp. 2d 322, 331-34 (S.D.N.Y. 2001), *aff’d*, 344 F.3d 229 (2d Cir. 2003). This Article uses the term “credit card” to include charge cards since both provide a cardholder with credit for some period.

² David A. Balto, *The Problem of Interchange Fees: Costs Without Benefits?*, 4 E.C.L.R. 215, 215-16 (2000); James M. Lyon, *The Interchange Fee Debate: Issues and Economics*, THE REGION, Jan. 19, 2006, <http://www.minneapolisfed.org/pubs/region/06-06/interchange.cfm> (“In 2004, card issuers earned approximately \$25 billion in revenue from interchange fees, according to one estimate. *The Wall Street Journal* reported in January 2006 that the figure was approaching \$30 billion”); The interchange fee is nominally a fee paid by acquirers—the industry term for entities providing card acceptance services to merchants—to issuers—the industry term for entities providing cards and related services to cardholders. *See* Eur. Comm’n, Competition DG, Fin. Servs. (Banking and Ins.), *Interim Report I: Payment Cards, Sector Inquiry under Article 17 Regulation 1/2003 on Retail Banking* 18 (Apr. 12, 2006), available at http://ec.europa.eu/comm/competition/antitrust/others/sector_inquiries/financial_services/interim_report_1.pdf [hereinafter *EC Report*] (defining payment card interchange fees as a “fee paid by an acquiring institution to an issuing institution for each payment card transaction at the point of sale of a merchant.”). Acquirers pass the fee on directly to merchants, and it accounts for about 75% of the fee paid by the merchant (i.e., the *merchant discount fee*). *In re* Visa Check/Mastermoney Antitrust Litig., 192 F.R.D. 68, 72 (E.D.N.Y. 2000) (“The [merchant] discount fee is largely based on the “interchange fee,” the fee that the acquiring institution pays the card-issuing institution every time it processes a payment by one of the card-issuing institution’s cardholders at one of the acquiring institution’s retailers.”). The European Commission has described this pass through as a “pass-on” effect and confirmed its existence in a complex econometric study. *EC Report*, *supra*, note 2 at 185. As of 2003, merchant discount rates on Visa and MasterCard payment cards averaged about 2% of the purchase price, about 1.7% of which constituted the interchange fee. DAVID S. EVANS & RICHARD

prohibit collaborative price setting,³ yet in the more than 30 years since the banks began setting these fees collectively, no U.S. court has held that they violate the law.⁴ That may soon change. In October 2005, more than a dozen private antitrust actions alleging that interchange fees constitute illegal price fixing were consolidated before the Judicial Panel on Multi-District Litigation.⁵ The potential damages are said to exceed the annual pre-tax profit of the entire U.S. banking industry.⁶ In April 2006, the European Competition Commission (“Commission”) issued a detailed report expressing concern that banks use interchange fees to protect their profits from competition.⁷ Three months later, the Commission issued a statement of objections in an independent investigation of MasterCard⁸ expressing a “preliminary view” that the system’s cross border interchange fees effectively set minimum prices for merchants and as such are “contrary to the EC Treaty’s ban on restrictive business practices.”⁹

SCHMALENSSEE, *PAYING WITH PLASTIC: THE DIGITAL REVOLUTION IN BUYING AND BORROWING* 11 (2d ed. 2005). In contrast, American Express charged a merchant discount rate of approximately 2.7% and Discover a rate of 1.5% in the 1990s. *Id.* at 186-87.

³ See *infra* Part V.B.1.

⁴ Visa’s interchange fees were explicitly upheld against an antitrust challenge in *Nat’l Bancard Corp. v. Visa U.S.A., Inc. (NaBanco)*, 779 F.2d 592 (11th Cir. 1986). Antitrust enforcement authorities, despite their natural tendency to be “concerned about fees that are established through an agreement among competitors,” EVANS & SCHMALENSSEE, *supra* note 2, at 285, have never formally challenged the payment card systems’ interchange fees.

⁵ *In re* Payment Card Interchange Fee and Merch. Disc. Antitrust Litig., 398 F. Supp. 2d 1356 (J.P.M.L. 2005). Discovery is proceeding, *In re* Payment Card Interchange Fee and Merch. Disc. Antitrust Litig., 2006 U.S. Dist. LEXIS 33750 (E.D.N.Y. May 17, 2006), and the class filed an Amended Class Action Complaint, No. 1:05-md-1720-JG-JO, 2006 WL 1488491 (E.D.N.Y. Apr. 24, 2006), and a First Supplemental Class Action Complaint, No. 1:05-md-1720-JG-JO (E.D.N.Y. July 5, 2006), available at http://www.unfaircreditcardfees.com/uploads/IPO_filing2.pdf. See generally *Merchants Sue Credit Card Companies Seeking Lower Fees*, CONSUMER AFFAIRS.COM, Sept. 27, 2005, http://www.consumeraffairs.com/news04/2005/credit_card_fee_suit.html (explaining that a consortium of convenience stores, chain stores, pharmacies, and groceries sued Visa, MasterCard, and large issuing banks arguing that anticompetitive interchanged fees increased a family’s costs by \$232 annually).

⁶ Keith Reid, *NACS Joins Lawsuit Against Visa and MasterCard*, Dec. 2005, NPNWeb.com, http://www.npnweb.com/uploads/featurearticles/2005/Technology/0512_tu.asp.

⁷ *EC Report*, *supra* note 2, at 77. The Commission describes its results:

[T]he above findings on the profitability of payment card issuing cast doubt on the assumption that in the absence of interchange fees, issuers could not recoup their costs from cardholders . . . seem[ingly] . . . confirm[ing] some recent theoretical predictions in the literature on two-sided markets suggesting that privately optimal interchange fees may be too high, notably if merchant fees increase with interchange fees but issuers do not pass the additional interchange fee revenue back to cardholders. In this case, high interchange fees are a way to transfer rents to the side of the scheme where they are least likely to be competed away.

Id.

⁸ Press Release, European Comm’n, Competition: Commission Sends Statement of Objections to Mastercard (MEMO 6) 260 (June 30, 2006), <http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/06/260&format=HTML&aged=1&language=EN&guiLanguage=en>.

⁹ *Id.* The European Commission’s concern with interchange fees is just the most recent in a line of regulatory investigations that have led to interchange fee regulation in England and Australia. See

These attacks on the interchange fee have instigated vitriolic responses from leading antitrust scholars who argue that fee regulation would harm consumers.¹⁰ Regulators and courts, they contend, do not understand the economics of payment card systems. What effect would an increase in competition have on interchange fees, and how would a move up or down affect consumers? “We do not know the answers to questions of this sort,” Victor Goldberg and Richard Epstein recently wrote, “any more than we know the optimal ratio of steel to aluminum for building a car. It is pre-

DON CRUICKSHANK, COMPETITION IN U.K. BANKING: A REPORT TO THE CHANCELLOR OF THE EXCHEQUER 31 (2000); AUSTRALIA COMPETITION AND CONSUMER COMM’N & RESERVE BANK OF AUSTRALIA, DEBIT AND CREDIT CARD SCHEMES IN AUSTRALIA: A STUDY OF INTERCHANGE FEES AND ACCESS (2000).

The Cruickshank Report led to a September 2005 decision by the Office of Fair Trading (“OFT”) determining that MasterCard’s historic interchange fees were higher than necessary to cover costs relating to transaction processing. OFFICE OF FAIR TRADING, *MasterCard Interchange Fees: Preliminary Conclusions* 6-8 (2003). In 2006, the OFT abandoned that decision on appeal to focus jointly on Visa and MasterCard’s current interchange fees. Press Release, Office of Fair Trading, OFT to Refocus Credit Card Interchange Fees Work (June 20, 2006), <http://www.oft.gov.uk/news/press/2006/97-06> (“We still believe that the interchange fee arrangements that are now in place could infringe competition law and are harmful to consumers, who pay higher prices as a result of these fees.”).

Similarly, the Australian market study led to a Reserve Bank decision that interchange fees should include only those costs relating to authorizing and processing, preventing fraud, and funding payments during the interest-free period. RESERVE BANK OF AUSTRALIA, *Reform of Credit Card Scheme in Australia IV: Final Reforms and Regulation Impact Statement* 37 (2002).

¹⁰ Richard Epstein expressed the view that payment card markets are extremely competitive and that any change to the collectively set interchange fee would be ruinous. Richard A. Epstein, *The Regulation of Interchange Fees: Australian Fine-Tuning Gone Awry*, 2005 COLUM. BUS. L. REV. 551, 595 (asserting that there is a “manifest need for a uniform interchange fee”); *id.* at 597 (“The rapid expansion of payment systems has exceeded the wildest expectations possessed by anyone even a decade ago. This expansion will not continue into the next decade if state regulation in Australia or anywhere else expands its hold over a complex system that has succeeded thus far without the guidance of an all too visible hand.”); Timothy J. Muris, *Payment Card Regulation and the (Mis)Application of the Economics of Two-Sided Markets*, 2005 COLUM. BUS. L. REV. 515, 542-43 (arguing that “[g]iven the presence of alternative payment methods, many consumers would avoid cards rather than pay more”); *id.* at 527 (suggesting that a reduction in credit card availability would drive “many consumers who cannot obtain unsecured credit through credit cards . . . to rely on pawn shops and payday lenders”).

Some leading credit card economists share this view. David Evans & Richard Schmalensee, *The Economics of Interchange Fees and Their Regulation: An Overview*, 5 (MIT Sloan Sch. of Mgmt., Working Paper No. 4548-05, 2005), available at <http://papers.ssrn.com/abstract=744705> (asserting that “[t]here is no apparent basis in today’s economics—at a theoretical or empirical level—for concluding that it is generally possible to improve social welfare by a noticeable reduction in privately set interchange fees”); Richard Schmalensee, *Payment Systems and Interchange Fees*, 50 J. OF INDUS. ECON. 103, 119 (2002) (identifying a scenario in which collectively set interchange fees may reduce social welfare, but arguing that regulators would not “have enough information to implement the socially optimal interchange fees” that his analysis reveals); Julian Wright, *The Determinants of Optimal Interchange Fees in Payment Systems*, 52 J. INDUS. ECON. 1, 22 (2004) (“Neither cost-based nor zero interchange fees finds any support from the analysis in this paper. . . . [A]lthough anticompetitive results are possible, [t]o disentangle the different possibilities additional empirical evidence is needed. Policymakers and proponents of interchange fee regulation have not provided any such evidence.”).

cisely because policymakers do not know, and cannot learn, the answers to these questions that they should let the marketplace sort them out.”¹¹

Perhaps this battle has been so pitched because virtually everyone who has thought about the issue has assumed that banks cannot feasibly compete on interchange fees, and the alternatives to the status quo proposed by regulators and litigants are singularly unappealing.

This Article examines the economic, historical, and legal analyses of interchange fees and concludes that competition among banks is workable and consistent with modern antitrust principles. Part I explains the interchange fee controversy. Part II then summarizes the economics of the two-sided credit card market in which competitors serve two distinct sets of customers—cardholders who use credit cards and merchants who accept them. Acknowledging that payment card markets are different from ordinary markets, this section critiques the assumption that these differences ensure that collectively set interchange fees *cannot*—or are extremely unlikely to—harm consumers. Economic theory does demonstrate that efficient systems will shift *some* revenue from merchants to the issuing side of a payment card system, and actual market practices confirm the theory. If certain market conditions prevail, however, banks may go too far, excessively shifting revenue from retail merchants—that would, in the main, compete it away to the benefit of virtually all consumers—to the banks that may be able to retain substantial supra-competitive profits. Economists have shown that inefficiencies are likely where card issuers have market power over merchants with inelastic demand and issuer profits are valued more highly than merchant-side profits. These conditions closely resemble those that now prevail in credit card markets.

Part III discusses the alternatives to collectively set interchange fees that have been implemented in other countries: (1) limiting interchange fees to amounts necessary to enable the issuers to recover certain costs; and (2) permitting merchants to surcharge card transactions to pass interchange fee expense to cardholders. Part III then demonstrates that these alternatives are wholly unsatisfactory on both practical and theoretical grounds. Most importantly, the economics of two-sided markets indicate that efficient pricing depends on the relative elasticity of demand between the two sets of customers. Optimal prices are thus unlikely to be a direct function of cost. The two proposed alternatives of tying interchange fees to costs or enabling merchants to pass interchange fees to cardholders through surcharges would stifle the ability to shift revenue efficiently between the two sides of the market, and thus be unlikely to lessen any inefficiencies resulting from collective interchange fee setting.

The next two Parts identify the conditions under which collectively set interchange fees may harm consumers, combating two widely held, but

¹¹ Victor P. Goldberg & Richard A. Epstein, *Introductory Remarks: Some Reflections on Two-Sided Markets and Pricing*, 2005 COLUM. BUS. L. REV. 509, 511.

incorrect, beliefs about the history of credit card markets and the applicable antitrust law. Part IV challenges the historic account that interchange fees were adopted by the early card systems because shifting revenue from merchants to the banks that issue cards is essential to the efficient operation of any payment card system. Alternatively, this Article suggests that the early revenue shifting may have arisen because of banks' uncertainty about the risks and rewards of unsecured consumer lending. A revenue stream from merchants may have been needed in the early days as a hedge against uncertainty. Now, however, the overwhelming success of credit card lending as a retail bank profit center may enable efficient payment systems with much less revenue from merchants.

Part V shows that antitrust legal analysis has fixated on the search for a single legal rule applicable to collectively set interchange fees. Antitrust is sufficiently contextual in its analysis, however, to permit more than one rule, depending on the need for collaboration in the industry. In credit card markets, the half dozen large issuers who account for about 85 percent of Visa and MasterCard transaction volume could compete without collectively set interchange fees. Each of those issuers is at least as large as the Discover Card system, which has set merchant fees individually for many years and maintained a vast merchant network almost as large as Visa and MasterCard.¹² By contrast, smaller issuers must collaborate on interchange fees in order to compete. Different rules may thus be applicable to each group of issuers. Part V also considers the various arguments that have been advanced concerning the efficiency of collectively set interchange fees. It concludes that, given the available evidence, large issuer collusion does not foster an efficient credit card system. Antitrust could thus condemn the collective setting of interchange fees by banks large enough to operate their own system, while allowing smaller issuers to continue to collaborate.

Part VI then proposes a competitive alternative to collectively set interchange fees. This remedy would (1) require large issuers to set their own interchange fees without leaving the Visa or MasterCard system, and (2) permit merchants to accept or reject Visa and MasterCard cards from individual large issuers just as the merchants now accept or reject American Express, Discover, and Diners Club cards. This remedy would both (1) permit efficient revenue shifting and (2) enable competitive forces to check the large card issuers' ability to charge inefficiently high interchange fees.¹³ There is some risk that individual large issuers would retain sufficient market power to maintain supra-competitive interchange fees, but the willing-

¹² Diners Club has existed since the 1950s, and Discover began in 1985. EVANS & SCHMALENSSEE, *supra* note 2, at 10, 62.

¹³ Under this proposal, smaller issuers could continue to collaborate on interchange fees, and merchants would be required, as is the case now with all Visa and MasterCard cards, to accept or reject all of the smaller bank cards as a group. *See infra* Part VI.B.

ness of many merchants to refuse to accept American Express indicates that merchants could combat individual issuer fee increases more effectively than they can resist the collective fees set by Visa and MasterCard.

I. THE INTERCHANGE FEES PROBLEM AND THE INADEQUACY OF PROPOSED REMEDIES

This section describes the basic structure of the industry and identifies the technical role of the interchange fee within that structure. It then summarizes the debate over interchange fees and critiques the commonly discussed potential remedies.

A. *Industry Structure and Interchange Fees*

There are two types of payment card systems: (1) unitary systems that issue virtually all of their own cards and sign up virtually all of their own merchants, a function known in the industry as *acquiring*; and (2) associations, principally Visa and MasterCard, in which individual banks compete among themselves and with the unitary systems to issue cards and acquire merchants. Although all payment card systems have the same basic structure,¹⁴ unitary systems, such as Diners Club and Discover,¹⁵ differ from the Visa and MasterCard associations in a fundamental way.¹⁶ In a unitary system, both cardholders and merchants pay the same entity, for example, Discover Financial Services, for the payment card service. In contrast, Visa and

¹⁴ The structure of payment card systems has been explained many times. A thorough history of the payment card industry can be found at EVANS & SCHMALENSEE, *supra* note 2, at 25-137. Summaries can be found in *United States v. Visa U.S.A., Inc.*, 163 F. Supp. 2d 322, 331-34 (S.D.N.Y. 2001) and VISA U.S.A.'S RULES FOR VISA MERCHANTS: CARD ACCEPTANCE AND CHARGEBACK MANAGEMENT GUIDELINES at 6-9 (2006), http://usa.visa.com/download/merchants/rules_for_visa_merchants.pdf [hereinafter RULES FOR VISA MERCHANTS] A slightly more detailed treatment can be found in Howard H. Chang, *Payment Card Industry Primer*, 2 PAYMENT CARD ECON. REV. 29 (2004).

¹⁵ Until recently, American Express was the quintessential unitary system. In recent years, however, it has adopted a hybrid approach in which it permits other entities on a selective basis to issue cards on its network without participating in the governance of the system. See http://en.wikipedia.org/wiki/American_Express (last visited June 6, 2007) (explaining that since 2004 American Express has entered agreements with several large Visa and MasterCard issuers to issue cards on the American Express network).

¹⁶ Systems also differ as to the type of cards that they offer. EVANS & SCHMALENSEE, *supra* note 2, at 1-2. For example, only American Express and Diners Club issue charge cards. This Article is applicable to both credit cards and charge cards. Charge cards are similar to credit cards in that both provide for delayed payment by the cardholder. *Id.* They differ in that with a charge card, a cardholder does not have the option to pay, with interest, over a time period longer than one to two months. *Id.* Visa and MasterCard also issue debit cards that enable the issuer to recover funds from a cardholder's bank account shortly after the transaction and thus do not permit delayed payment by the cardholder. *Id.* at 9.

MasterCard do not deal directly with cardholders or merchants. Instead, thousands of banks compete in both issuing and acquiring. Potentially, the cardholder and merchant involved in a particular transaction could be clients of the same bank.¹⁷ But most Visa or MasterCard transactions will involve four parties: (1) the cardholder and (2) the issuing bank, on the one hand, and (3) the merchant and (4) its acquiring bank, on the other.

In an association system, issuing banks set their own fees to cardholders. The fee paid by merchants, known as the merchant discount, consists of two components: (1) the amount retained by the acquiring bank, which is set individually by each acquirer; and (2) the collectively set interchange fee, which is the portion of the merchant discount that is paid to the issuing bank. Generally, in the Visa and MasterCard systems, the issuer receives about 75 percent of the total merchant discount, leaving 25 percent for the acquiring bank.¹⁸ The bulk of the merchant fee thus supports card issuance rather than any direct service that the merchant receives.

Unitary systems do not technically have an interchange fee because all merchants and cardholders interact with the unitary system, obviating the need to divide the merchant fee between the acquirer and the issuer. Economically, however, whenever a unitary system's merchant discount fee exceeds the amount necessary to provide the merchant with card acceptance services—and they always do¹⁹—the excess merchant fee supports the issuing of cards in the same manner as the interchange fee in an association system.

B. *The Interchange Controversy*

This section sets out the merchants' objection to, and the payment card systems' defense of current interchange fees.

1. The Merchants' Concern

Banks set interchange fees collectively from the early 1970s through the mid-1990s without generating significant legal or economic debate.²⁰

¹⁷ In industry parlance this situation is known as an "on-us" transaction. *Nat'l Bankcard Corp. (NaBanco) v. Visa U.S.A., Inc.*, 596 F. Supp. 1231, 1240 (S.D. Fla. 1984). In such a transaction, a single entity retains the entire merchant discount. *Id.*

¹⁸ Alan S. Frankel, *Monopoly and Competition in the Supply and Exchange of Money*, 66 ANTI-TRUST L. J. 313, 340 (1998).

¹⁹ See *infra* Part VI.A.

²⁰ In the early 1980s, a private antitrust case filed by an acquirer rejected a challenge to the interchange fee. *NaBanco*, 779 F.2d at 592 (11th Cir. 1986), *aff'g*, 596 F. Supp. 1231 (S.D. Fla. 1984). After *NaBanco*, careful analysis of interchange fees "for the most part . . . languished in obscurity until around the turn of this century." Evans & Schmalensee, *supra* note 10, at 3.

Although merchants complained about American Express's fees,²¹ which were set unilaterally, most were content with the jointly set Visa and MasterCard fees.

In the mid-1990s, this equilibrium ended for two reasons. First, interchange fees began to climb despite declining transaction processing costs.²² Merchants complained that a technologically advanced banking system with large scale economies and diminishing fraud losses should not be increasing what were already the world's highest interchange fees.²³ Second, card acceptance began to spread to merchants that had smaller profit margins and less to gain from card acceptance.²⁴ For some of these merchants, total fee expense approaches bottom line profits.²⁵

The obvious competitive response to these developments would have been for merchants to stop accepting credit cards. That did not happen, however, largely because of competitive conditions in the merchant markets. If they could lawfully collaborate—which they cannot—competing merchants could jointly threaten to stop accepting credit cards unless banks reduced the interchange fees.²⁶ But no single merchant could credibly make

²¹ EVANS & SCHMALENSEE, *supra* note 2, at 185-87.

²² See *infra* Part I.B.2. In the late 1990s, a class of merchants attacked Visa's and MasterCard's debit card interchange fees on the ground that acceptance of these debit cards was illegally tied to credit cards. *Wal-Mart Stores, Inc. v. Visa U.S.A., Inc.*, 396 F.3d 96 (2d Cir. 2005). The parties reached a settlement favorable to merchants. See *id.* The case did not directly address the collective setting of credit card interchange fees. See *id.* These fees have also become more complicated. See Lyon, *supra* note 2. The single interchange fee has been replaced with an elaborate taxonomy that varies by merchant type, payment process, and even type of credit card. *Id.* As a Federal Reserve Bank First Vice President recently explained:

Both Visa and MasterCard have drawn up intricate interchange fee schedules describing fees that vary by the merchant's industry, the method of card acceptance, the type of card, transaction size and special deals. Supermarkets and other merchants that sell low-margin items pay lower rates, for example. Face-to-face transactions are typically charged a lower fee than mail-order transactions. Swiping is charged less than hand-keying. Traditional credit cards and rewards cards have different rates as well; merchants will receive a fraction less if a customer uses a rewards card. Fees also vary by the size of transaction. And finally, a few large merchants, including Wal-Mart, Sears and large grocery chains, have negotiated special interchange fee deals.

Lyon, *supra* note 2.

²³ Complaint ¶¶ 97-102, Nat'l Ass'n of Convenience Stores v. Visa U.S.A., Inc., No.: 1:05-CV-04521 (E.D.N.Y. Sept. 23, 2005), 2005 WL 3677774; Missy Baxter, *Interchange Wars: Merchants Tug Networks for Change*, ATM Marketplace.com, Feb. 11, 2006, <http://www.atmmarketplace.com/article.php?id=6721> ("The United States has one of the highest interchange fees on the globe, which is surprising, considering that our banking system is more technologically advanced than systems in most other countries . . .") (quoting Plaintiff's counsel); Lyon, *supra* note 2; Reid, *supra* note 6.

²⁴ For example, supermarkets have much smaller profit margins than the types of merchants that had previously accepted cards—travel and entertainment and retail merchants—and they have much less to gain from card acceptance because consumers rarely need to rely on credit for subsistence purchases. See Lyon, *supra* note 2.

²⁵ *Id.*

²⁶ A group boycott of this type would almost certainly violate Section 1 of the Sherman Act. Although most concerted refusals to deal are now evaluated under the rule of reason, naked boycotts by

that threat because unilateral merchant action would drive consumers to competitors who continued to accept cards.²⁷

Rather than drop credit cards and risk losing customers, merchants attempted to negotiate lower fees. Although acquirers (i.e., the entities signing up merchants), responded competitively with respect to the fees that they controlled, they had no control over interchange fees, which the association systems generally treated as non-negotiable.²⁸ The merchants' inability to negotiate likely led to a sense of vulnerability that exacerbated their concerns about fee levels.²⁹

These factors led merchants to look for a legal basis to attack the interchange fees. Appreciating that the banks' power arose from their collective offer—either the merchants accepted all banks' cards or none—merchants sought a means to attack the banks' unified approach. The suspect status of collectively set fees provided a ready basis for legal challenge, if not a self-evident remedy.

2. The Banks' Substantive Reply

The payment card associations have responded that interchange fees are necessary to balance the costs of the system and thereby optimize credit card use, an outcome that benefits cardholders and merchants alike.³⁰ Ac-

groups of competitors against a supplier remain per se illegal. HERBERT HOVENKAMP, FEDERAL ANTITRUST POLICY: THE LAW OF COMPETITION AND ITS PRACTICE § 5.4a, at 221 (3d ed. 2005).

²⁷ See *United States v. Visa U.S.A., Inc.*, 163 F. Supp. 2d 322, 340-41 (S.D.N.Y. 2001) (describing merchants' inability to stop accepting Visa and MasterCard payment cards despite increases in interchange fees); cf. *Muris*, *supra* note 10, at 522 ("Most merchants . . . cannot accept just one major card because they are likely to lose profitable incremental sales if they do not take the major payment cards.").

²⁸ Exceptions were sometimes made for the largest merchants, such as Wal-Mart. Lyon, *supra* note 2.

²⁹ This dynamic is exemplified by relative lack of complaints about American Express, even though it still has higher merchant discounts than Visa and MasterCard. Lyon, *supra* note 2. Because the entire American Express merchant discount was negotiable, and because merchants felt that they could discontinue American Express acceptance without losing too many sales, they did not feel as vulnerable as they did with respect to Visa and MasterCard. See Barbara Hagenbaugh, *American Express Fees Take Flak*, USA TODAY, Dec. 22, 2004, available at http://www.usatoday.com/money/perfi/general/2004-12-22-amex_x.htm (noting that in 2004 Walgreens drug stores stopped accepting American Express).

³⁰ MasterCard has posted a statement regarding these claims on the internet, explaining that: "[s]ince interchange is set to maximize network volume, it cannot be examined in isolation, as some merchants are trying to do by complaining their costs of accepting payment cards are too high. Interchange must be examined in the context of the need to balance the higher costs of card issuance with the benefits to merchants of card acceptance, so that cardholders, merchants and financial institutions all continue to benefit from today's strong, competitive payments landscape."

Mastercard Worldwide, *US Merchant Interchange Lawsuit*, http://www.mastercard.com/us/company/en/newsroom/interchange_lawsuit.html (last visited June 6, 2007).

ording to their calculations, the costs of card issuing greatly exceed the costs of merchant acquiring, and consumers would not be willing to pay the cost necessary to maintain a system with sufficient volume to support the services consumers and merchants have come to expect.³¹ Merchants, by contrast, are willing to pay for the point-of-sale spending flexibility and checkout line efficiency that only payment cards provide. As a result, payment systems need to shift revenue from the merchant side to the cardholder side where it can be used to encourage card usage through lower prices and rewards.³² From the banks' perspective, merchants fully appreciate the benefits of credit cards; they simply balk at the price.

II. THE ECONOMICS OF INTERCHANGE

Collective price setting ordinarily correlates with anticompetitive activity and supra-competitive prices. This section explains that, given the economics of the two-sided payment card market, the factors raising anti-trust suspicion in ordinary markets are not necessarily cause for concern. Interchange fees may nonetheless be used to exploit market power. By tracing the major economic models of the payment card market, this section identifies where a court should focus its attention in assessing the competitive impact of collectively set interchange fees.

A. *The Basic Economics of Two-Sided Markets*

Payment card systems compete in a two-sided market. This type of market is characterized by the need to compete for two types of customers with different elasticities of demand. For example, newspapers must attract both readers and advertisers; technology suppliers must attract both hardware and software companies to support their formats; and, dating services need both men and women. A two-sided market exhibits both network effects—the value to each user grows as the total number of users grows—and positive feedback effects—more users on one side create added value for users on the other.³³

³¹ Nat'l Bancard Corp. (*NaBanco*) v. Visa U.S.A., Inc., 596 F. Supp. 1231, 1261 (S.D. Fla. 1984).

³² EVANS & SCHMALENSEE, *supra* note 2, at 285 (summarizing the payment card systems defense of the interchange fees).

³³ Empirical analysis has recognized a regional correlation between consumer usage and merchant acceptance for the four major payment card systems in the U.S., suggesting a positive feedback loop between consumer usage and merchant acceptance. *EC Report*, *supra* note 2, at 6 & n.9 (citing Marc Rysman, *An Empirical Analysis of Payment Card Usage* (Boston Univ. Working Paper, 2004), <http://www.bu.edu/econ/workingpapers/papers/Marc%20Rysman/wp2004/DeterminantsOfPaymentCardUsage.pdf>). This finding suggests that usage rather than interchange fee level plays a greater role in merchant acceptance.

To optimize output in two-sided markets, suppliers cannot necessarily price *each side* at marginal cost plus normal profit.³⁴ Instead, economists have shown that “[a]n increase in marginal cost on one side does not necessarily result in an increase in price on that side relative to price on the other side.”³⁵ Equilibrium pricing depends on the price elasticities of demand of customers on both sides, the network effects, and the marginal costs resulting from changing output on each side.³⁶ The choice among pricing structures will have a real impact on the final equilibrium.³⁷

To illustrate, newspapers typically provide papers to readers below their marginal production and distribution costs in order to build sufficient readership to attract advertisers.³⁸ Technology suppliers may need to license hardware manufacturers at very low royalties to build a sufficient base to attract software producers who might then pay a per unit royalty in much higher total amounts. And dating services may need to charge much less than marginal cost to one sex in order to have sufficient numbers of both.

A payment card system, of course, must convince both cardholders to use cards and merchants to accept them, and a system’s success in either market has a direct effect on the other. The more highly consumers value card usage, the more merchants will accept cards. Similarly, the more merchants that accept cards, the more cardholders will value card use.

B. *Significant Models of Payment Card Competition*

Two-sided markets differ from ordinary markets. In most markets, price collusion generally harms consumers by enabling competitors to restrict output and raise price³⁹ because the seller knows that raising a product’s price will reduce its sales only in the market for that product. In a two-sided market, by contrast, increasing the price of the product or service on one side of the market will not only reduce demand on that side, but it will also reduce demand on the other side.⁴⁰ For example, increasing subscription rates for newspapers will not only lead to fewer readers, but it will also

³⁴ David S. Evans, *The Antitrust Economics of Multi-Sided Platform Markets*, 20 YALE J. REG. 325 (2003).

³⁵ David S. Evans & Michael Noel, *Defining Antitrust Markets When Firms Operate Two-Sided Platforms*, 2005 COLUM. BUS. L. REV. 667, 681.

³⁶ *Id.*

³⁷ Dennis W. Carlton & Alan S. Frankel, *Transaction Costs, Externalities, and “Two-Sided” Payment Markets*, 2005 COLUM. BUS. L. REV. 617, 626-32.

³⁸ Benjamin Klein et al., *Competition In Two-Sided Markets: The Antitrust Economics Of Payment Card Interchange Fees*, 73 ANTITRUST L.J. 571, 577 (2006).

³⁹ *NCAA v. Bd. of Regents of the Univ. of Okla.*, 468 U.S. 85 (1984) (explaining that price fixing and output reduction are condemned per se “because the probability that these practices are anticompetitive is so high”).

⁴⁰ Evans & Noel, *supra* note 35, at 695.

result in less advertising revenue because that revenue is a function of the number of readers.

Two-sided markets can also limit a firm's ability to retain excess profits. Rents captured because of market power on one side may simply be competed away if the other side remains competitive.⁴¹ A monopolist newspaper might be able to increase subscription rates to readers to supra-competitive levels, but it might then compete away that revenue in the competitive market to attract advertising dollars.⁴²

Still, two-sidedness does not block all potentially anticompetitive outcomes. Economists have identified two factors that combined can lead to excessively high interchange fees—issuer market power over merchants with inelastic demand and a system favoring issuer profits over acquirer profits.⁴³ In short, one cannot presume that payment system markets behave anti-competitively based on the assumptions applied to standard markets, but they may behave anti-competitively nonetheless. The following sections illustrate the evolution of economic analysis of payment system markets.

1. No Competitive Harm from Collusion Where No Market Power Exists

Bill Baxter first demonstrated that in payment system markets, the standard assumption that collusive price setting reduces output does not necessarily hold. Cardholders and merchants may have differing demands for card services, and issuing banks and acquiring banks may have differing cost structures.⁴⁴ In general, he concluded, one side of the transaction will be able to recover more than its costs, given the elasticity of demand of the consumers on that side.⁴⁵ To optimally satisfy the demands of both sides, Baxter concluded, some exchange payment between issuing banks and acquiring banks would ordinarily be required. Since a payment from the issuing bank to the acquiring bank was necessary to compensate merchants, transaction costs would likely be minimized by adjusting that payment accordingly.⁴⁶

⁴¹ *Id.*

⁴² *See id.* at 670-71. Some have argued that competitors in a two-sided market would have to fix prices on both sides. "Otherwise they would shift the profits from customers on the side with lower, fixed prices to customers on the other side, whose prices have not been fixed." *Id.* But this goes too far. Prices need not be fixed on both sides of the market if competitors can differentiate their products sufficiently to retain some profit on the side in which prices are not fixed.

⁴³ William F. Baxter, *Bank Interchange of Transactional Paper: Legal and Economic Perspectives*, 26 J.L. & ECON. 541, 586 (1983).

⁴⁴ *See id.* at 542-53.

⁴⁵ *See id.* at 553 (explaining that costs are unlikely to equal revenue on each side of the market, requiring some revenue transfer).

⁴⁶ *See id.* at 553 n.9. As Baxter explains:

Baxter further concluded that the interchange fee needed to be set collectively for two reasons.⁴⁷ First, the number of bilateral agreements necessary to set fees non-collusively would impose wastefully high transaction costs.⁴⁸ Second, issuing banks would have an incentive to exploit their monopsony position to demand higher than optimal interchange fees because they would capture all of the extra fee, but bear only a fraction of the loss in overall system volume, as a result of higher prices to merchants.⁴⁹ Baxter believed that merchants could not combat individual issuer demands for excessively high interchange fees, because without advanced electronic processing, merchants had no means to discriminate against particular issuers without dramatically increasing transaction costs.⁵⁰ Moreover, Baxter concluded that discrimination against cards would diminish “[t]he utility of the system to all participants” and the system’s “viability in competition with other payment systems.”⁵¹

2. Limitations in the Baxter Model

Baxter assumed that both card issuing and merchant acquiring were perfectly competitive,⁵² and that interchange fees would be driven by banks’ costs in serving each side of the market.⁵³ Merchants, he assumed, accepted cards from consumers because doing so lowered transaction costs and that all merchants essentially receive the same benefit from accepting cards.⁵⁴ Given these assumptions, merchants would want to encourage cus-

In four-party payment mechanisms . . . a side payment between the [cardholder and merchant], coupled with payment by each [cardholder and merchant to their respective banks] in amounts equal to respective bank costs but not to respective marginal utilities of [cardholders and merchants], is theoretically sufficient to attain equilibrium. That in practice side payments between banks occur instead is strong evidence that higher transaction costs characterize side payments that take the form of price adjustments between the principals.

Id.

⁴⁷ Although Baxter recognized that output could be restrained by a cartel of banks, he believed that to be effective the cartel would have to control both sides of the transaction. *Id.* at 554-55. An attempt to exploit market power on only one side would result in inefficient competitive dissipation of the rents on the other side. *Id.* at 555 n.12.

⁴⁸ *See id.* at 556, 576.

⁴⁹ Baxter, *supra* note 43, at 576-77.

⁵⁰ *Id.* at 576. Baxter also believed that acquirers would tend to blend issuer interchange fees into a single merchant fee, making it difficult for merchants to identify the issuers demanding the highest fees. *Id.*

⁵¹ *Id.* Baxter would permit, however, bilaterally negotiated interchange fees thus making the collective fee “merely a guarantee that no card-issuing bank will demand a higher fee on transactions presented to it in the absence of such a bilateral arrangement.” *Id.* at 586.

⁵² *Id.* at 554.

⁵³ *See id.* at 575, 578.

⁵⁴ Wright, *supra* note 10, at 2; *see* Jean-Charles Rochet & Jean Tirole *Cooperation Among Competitors: Some Economics of Payment Card Associations*, 33 *RAND J. ECON.* 549, 564 (2002).

tomers to use cards. Because of the transaction costs inherent in charging non-uniform prices, however, merchants could not provide appropriate price incentives to encourage card use. By paying interchange fees to issuer banks that could provide incentives for consumers to use credit cards, and then eating those fees, merchants could achieve the same result.⁵⁵

Whether this was a realistic view of the market when Baxter conducted his analysis in 1983, it seems particularly unrealistic today. Baxter likely both overstates merchant ability to resist increases in interchange fees,⁵⁶ and understates the differences in the level of their resistance⁵⁷ and their willingness *not* to pass those fees on to consumers.⁵⁸

Despite these shortcomings, Baxter's analysis continues to be influential. More recent analysis has confirmed his conclusion that the indicators of anticompetitive behavior applicable in standard markets do not hold in two-sided payment card markets even where the systems have market power,⁵⁹ and that payment card systems will select an interchange fee level that will "balance the extra card usage from a higher interchange fee against the loss in card transactions from the lower merchant acceptance, in order to maximize the product of consumer and merchant demand for cards."⁶⁰ When more realistic assumptions are introduced, however, economists have identified the potential for consumer harm through excessive interchange fees.

3. Market Power May Lead to Anticompetitive Interchange Fees

Richard Schmalensee has demonstrated that in a credit card market with a monopolist issuer and acquirer system, profit would be maximized by setting an interchange fee that maximized output.⁶¹ To be sure, the fee may generate prices above the marginal cost of serving the merchant, but that may benefit the system and consumers.⁶² By moving revenue to the issuing side of the market "where demand elasticity is high," banks can cut prices to cardholders, expand the system, and "increase[] the size of the pie

⁵⁵ Baxter, *supra* note 43, at 553 n.9, 553-56.

⁵⁶ Rochet & Tirole, *supra* note 54, at 564.

⁵⁷ See Wright, *supra* note 10, at 2 (certain merchants, such as rental car and internet merchants, have a greater need for cards than others).

⁵⁸ See *id.* at 23-24 (discussing the effects of altering the rule preventing merchants from adding surcharges to credit card purchases).

⁵⁹ Schmalensee, *supra* note 10, at 118-19; see also Wright, *supra* note 10, at 22 (noting that proponents of regulating interchange fees usually cite the overuse of credit cards, as opposed to the underuse normally associated with monopolies). Wright, *supra* note 10, at 3, 22.

⁶⁰ Wright, *supra* note 10, at 3, 10.

⁶¹ Schmalensee, *supra* note 10, at 110-11.

⁶² See *id.*, at 103-06.

for the system as a whole.”⁶³ A monopolist card system would also recognize that increasing interchange fees would lower merchant acceptance, making the system less valuable to cardholders who will decrease their card use.⁶⁴ To avoid that result, Schmalensee argued, a monopolist card system should set interchange fees at an optimal level.

Once one moves beyond a monopolist system to a more realistic “multiple issuer” system in which issuing-side profit is weighted more highly than acquiring side profits, which is consistent with actual market structure, Schmalensee recognized that interchange fees may increase above the optimal level “in order to transfer profit to the issuer,” decreasing both system output and social welfare.⁶⁵

4. Issuer Market Power Can Lead to Competitive Harm, Particularly if Merchants Accept Cards for Strategic Reasons

Valuable as it was, Schmalensee’s model did not account for the different reasons that merchants accept cards. Merchant demand for payment cards is driven not just by the direct value of card acceptance—such as more customer purchasing power and more efficient checkout—but also by strategic considerations, such as stealing business from competitors who do not accept cards (or guarding against the loss of business to those who do).⁶⁶

Julian Wright has shown that the direct benefits of credit cards alone would not lead merchants to pay a sufficient amount to support an optimal level of card issuance, because merchants would fail to account for the benefits of using cards to infra-marginal customers who would purchase from the merchant even if the merchant did not accept cards.⁶⁷ But if merchants take account of the strategic benefits of card issuance, they are likely to accept cards even where their costs exceed their transaction-by-transaction benefits.⁶⁸ By exploiting this opportunity to increase interchange fees, card issuers may increase social welfare by forcing merchants to internalize the benefits that cardholders realize from using their cards.⁶⁹

Increasing interchange fees, however, may not necessarily yield a socially positive result. Issuers with market power will seek to maximize

⁶³ See *id.* at 115 (“[I]ncreasing total output . . . by subsidizing price cuts where demand elasticity is high . . . increases the size of the pie for the system as a whole.”).

⁶⁴ Wright, *supra* note 10, at 3, 10, 12-13.

⁶⁵ Schmalensee, *supra* note 10, at 116-17.

⁶⁶ Wright, *supra* note 10, at 3.

⁶⁷ See *id.* at 8.

⁶⁸ *Id.* at 17.

⁶⁹ Rochet & Tirole, *supra* note 54, at 566.

profit by increasing interchange fee income.⁷⁰ Although they will use this income to lower cardholder prices, and thereby gain share from alternative means of payment,⁷¹ they prefer to set the interchange fee at the highest level that would retain merchant acceptance, regardless of the fee level necessary to stimulate card use competitively.⁷²

According to Jean-Charles Rochet and Jean Tirole, whether an issuer will choose a socially optimal fee level depends on the level of merchant resistance to increased interchange fees.⁷³ If merchant resistance is strong, interchange fees are more likely to be set at the socially optimal level.⁷⁴ If merchant resistance is weak, which is likely because of their strategic need for cards, interchange fees will be too high.⁷⁵

Because they assume that all merchants are identical, Rochet and Tirole do not capture the full trade-off between cardholder and merchant demand.⁷⁶ In contrast, Julian Wright has incorporated differences in merchant demand levels,⁷⁷ and shows that a payment card system's private goal to maximize profit will also optimize output and social welfare only "if costs are passed through by the same amount [from acquirers to merchants and from issuers to cardholders] on both sides of the market."⁷⁸ Where acquirers pass through a greater percentage of interchange fee costs on to merchants than issuers pass interchange revenue to cardholders in the form of lower fees or rebates, then interchange fees will be anti-competitively high as profits shift to card issuers that are best situated to retain those profits.⁷⁹

⁷⁰ *Id.* at 554; Wright, *supra* note 10, at 12. In contrast, if issuers compete away the interchange income, they "should rather choose a low merchant discount to ensure a wide acceptance of the card." Rochet & Tirole, *supra* note 54, at 563.

⁷¹ *Id.* at 554.

⁷² *Id.* at 558-59.

⁷³ *Id.*

⁷⁴ *Id.*

⁷⁵ *Id.* at 566. In a recent Justice Department case against Visa and MasterCard, merchants testified that they had little ability to resist increases in interchange fees. *United States v. Visa U.S.A., Inc.*, 163 F. Supp. 2d 322, 336 (S.D.N.Y. 2001). In the Justice Department case against Visa and MasterCard, merchants, "including large, prominent, national retail chain stores, such as Target and Saks Fifth Avenue," testified "that if they were to stop accepting Visa and MasterCard general purpose cards they would lose significant sales." *Id.* at 337. The court concluded that "these merchants believe they must accept Visa and MasterCard, even in the face of very large price increases." *Id.*

⁷⁶ Wright, *supra* note 10, at 3.

⁷⁷ *Id.*

⁷⁸ *Id.* at 12.

⁷⁹ *Id.* at 12 ("The profit maximizing interchange fee will be higher than the interchange fee which maximizes output, with some transactions being sacrificed in order to transfer per-transaction profits to the side of the market where they will be competed away less."). Wright further finds that "the interchange fee is set away from the output maximizing level in order to increase the equilibrium profits of the side of the market which has greater control over setting interchange fees." *Id.* at 11 n.12. Wright's analysis also shows that the output maximizing interchange fee will not coincide with the welfare maximizing fee when there is an "asymmetry in the marginal and infra-marginal benefits of card users and merchants . . ." *Id.* at 12-14. Assuming that issuers control the interchange fee, they may thus trade

III. THE INADEQUACY OF PROPOSED SOLUTIONS

Those who have concluded that collectively set interchange fees are anticompetitive—including regulatory authorities,⁸⁰ economists,⁸¹ and legal commentators⁸²—have proposed two types of remedies, both of which would permit joint interchange fee setting to continue.⁸³ The first would regulate the costs that a card system may use to calculate its interchange fees, and the second would permit merchants to surcharge credit card transactions so that interchange fees could be passed directly to consumers using credit cards.⁸⁴ The following sections explain why neither of these remedies is desirable.

A. *Cost Regulation Would Undermine the Economic Purpose of Interchange Fees*

Several countries are attempting to regulate interchange fees based on the card issuers' cost,⁸⁵ and the complaining merchants and some commentators have argued that interchange fees should be abolished (i.e., simply be set at zero), because issuers can cover their costs without them.⁸⁶

higher margins per transaction for a reduction in output as a result of decreased merchant demand. *Id.* at 15, 25.

⁸⁰ For example, the European Commission determined that Visa's interchange fee constituted illegal collective price setting, but subsequently determined "that no feasible alternative to collectively determined fees existed." Muris, *supra* note 10, at 535 & nn. 55-56.

⁸¹ Frankel, *supra* note 18, at 341-42, 347-49 (suggesting that eliminating interchange fees would be extremely disruptive).

⁸² Avril Dieser's recent article concludes that interchange fees are higher than they should be and proposes that they be set based on costs that are openly disclosed to merchants and consumers. Avril McKean Dieser, *Antitrust Implications of the Credit Card Interchange Fee and an International Survey*, 17 LOY. CONSUMER L. REV. 451, 491-95 (2005). Although he purports to conduct a Section 2 analysis and conclude that Visa and MasterCard have engaged in unlawful monopolization, he does not explain why simply charging a higher price could meet that test or how his proposed disclosure remedy would foster the sort of competition that the antitrust laws are designed to encourage.

⁸³ Two leading payment card economists explain that the issue "has been whether the [payment card systems] can be trusted to set the fee themselves, whether the government should set the fee, or whether the government should impose guidelines on how the [payment card systems] set the fee." EVANS & SCHMALENSEE, *supra* note 2, at 286.

⁸⁴ See Muris *supra* note 10, at 530-49. Both approaches are currently being employed in some countries. See *EC Report*, *supra* note 2, at 32, 123.

⁸⁵ See REFORM OF CREDIT CARD SCHEME IN AUSTRALIA IV: FINAL REFORMS AND REGULATION IMPACT STATEMENT *supra* note 9 and sources cited therein.

⁸⁶ Complaint ¶¶ 99, 102, Nat'l Ass'n of Convenience Stores v. Visa U.S.A., Inc., (E.D.N.Y. Sept. 23, 2005), 2005 WL 3677774. The complaint alleges that:

[G]iven the ubiquity of Visa and MasterCard payment cards, banks now would find it in their interest to issue Visa and MasterCard payment cards and acquire merchants for the Associations, even without the promise of large Interchange Fee revenues. . . . The collective fixing

Systems attempting to regulate price based on costs have historically been plagued with practical problems even in industries where theory would predict that optimal prices can be set based on cost. In credit card markets, there is reason to believe that these practical problems would be just as bad. Moreover, even as a matter of theory, cost-based regulation cannot be expected to produce optimal interchange fees.

1. Practical Problems with Cost Regulation Systems

The foreign antitrust authorities have permitted banks to continue the collective rate-setting process so long as the fees are based on particular, objective costs.⁸⁷ That solution has been condemned as singularly unsatisfactory. First, even if one accepts the theory that prices could be set at optimal levels through a regulatory process that focused on costs, the history of cost regulation is fraught with serious practical problems in large part because costs are too manipulable to serve as an objective means to regulate price.⁸⁸ In short, a firm has little incentive to cut cost if its revenue is tied directly to cost. There is little new to say about why regulatory schemes to

of the Interchange Fee is not reasonably necessary to the operation of the Visa and MasterCard networks.

Id.; see also Balto, *supra* note 2, at 219-20; Frankel, *supra* note 18, at 341 n.72, 347-49 (arguing that interchange fees are unnecessary, but also arguing that abolishing them now would be disruptive).

⁸⁷ In 2002, a European Commission decision established the cost components for consumer card interchange fees, required Visa to conduct a study to justify its costs, and set an annual ceiling on Visa's interchange rates through 2007. *EC Report*, *supra* note 2, at 21 (citing Press Release, European Comm'n, Commission Exempts Multilateral Interchange Fees for Cross-Border Visa Card Payments (IP2) 1138 (July 24, 2002)); Commission Decision, Relating to a Proceeding Under Article 81 of the EC Treaty and Article 53 of the EEA Agreement (EC) No. 914/2002 of 24 July 2002, 2002 O.J. (L 318) 17, 18, http://eur-lex.europa.eu/LexUriServ/site/en/oj/2002/l_318/l_31820021122en00170036.pdf. In 2003, the Commission opened a similar investigation of MasterCard. European Comm'n, Middy Express, Statement on Master Card, Oct. 30, 2003, <http://europa.eu/rapid/pressReleasesAction.do?reference=MEX/03/1030&format=HTML&aged=1&language=EN&guiLanguage=en>. Regulatory authorities in Spain and Italy concluded "that interchange fee agreements infringe competition law, but that they could be allowed if the fees were set on the basis of costs incurred by issuing banks for providing card-related services." *EC Report*, *supra* note 2, at 32. The Australian competition authorities have reached much the same conclusion. RESERVE BANK OF AUSTRALIA, REFORM OF CREDIT CARD SCHEME IN AUSTRALIA IV, *supra* note 9, at 37. See generally Luc Gyselen, *Multilateral Interchange Fees Under E.U. Antitrust Law: A One-Sided View on a Two-Sided Market?*, 2005 COLUM. BUS. L. REV. 703 (explaining that the European Commission found Visa's jointly set cross border interchange fees anticompetitive under Article 81-1 of the European Community Treaty, but then permitted jointly set interchange fees limited to the recovery of certain costs).

⁸⁸ Balto, *supra* note 2, at 219. Balto reasons that:

[A]s decades of unsuccessful government regulation have demonstrated, setting price based on cost often creates the wrong incentives for the market. If price is based on cost, there may be insufficient incentive for the venture or its members to attempt to reduce costs, because they know that at the end of the day, all of those costs will be recovered.

Id.

set price based on costs have in practice worked so poorly, and given the lack of an established regulatory structure for credit card systems, one should not expect the practical problems with cost regulation to be any less in credit card markets.

2. Theoretical Problems with Interchange Fees Based on Costs

With interchange fees, an optimal price stands almost no chance of tracking costs even at the theoretical level. Generally, economic theory predicts that optimal prices will be a function of costs. In credit card markets, however, economists have shown that, except by happenstance, the optimal interchange fee will be neither zero nor determinable by any strictly cost-based measure.⁸⁹ Because of the two-sided nature of credit card markets—services are sold to both cardholders and merchants and each side affects the other—costs play a significantly reduced role in determining the optimal price.

Maximizing output requires issuers and acquirers to set prices in a way that will provide proper incentives for card use and acceptance. Balancing costs in some fashion would achieve this result only if the elasticity of demand on both sides were equal and setting the fee to zero would maximize output only if both costs and demand were equal.⁹⁰ Because neither is likely to be true, one should not expect either a cost-based or zero interchange fee.

As a result, even if one could overcome the practical problems that have plagued virtually every prior cost-based regulatory scheme, the interchange fee flowing from any formula that looked exclusively at costs would likely be far from optimal.

B. *Merchant Surcharging of Card Transactions May Reduce Consumer Welfare: Practical and Theoretical Problems*

Some commentators and regulators in other countries have focused on eliminating the payment card system rule⁹¹ that prohibits merchants from surcharging card transactions.⁹² This potential remedy appeals to many be-

⁸⁹ Schmalensee, *supra* note 10, at 114 (“Unless the partial demand functions are identical, using cost-based regulation to determine [the per transaction interchange fee] will maximize system output only by chance.”).

⁹⁰ *Id.* at 118-19; Wright, *supra* note 10, at 22.

⁹¹ See RULES FOR VISA MERCHANTS, *supra* note 14, at 10; MASTERCARD INTERNATIONAL MERCHANT RULES MANUAL § 9.1.2 (2006), http://www.mastercard.com/us/wce/PDF/MERC-Entire_Manual.pdf.

⁹² Frankel, *supra* note 18, at 347-49; Evans & Schmalensee, *supra* note 10, at 26. This rule generally does not prohibit discounts for cash or other forms of payment, only charging extra for using cards. See Baxter *supra* note 43. Most merchants do not attempt to price discriminate through discounts or

cause it appears to place the costs in the card system on the party generating the cost. If merchants were free to charge extra for using a particular card, the argument goes, then cardholders would internalize the interchange fees that their issuers charge to merchants. The card issuers would then risk losing transaction volume if cardholders switched to a different issuer or a different method of payment as a result of the surcharge, and issuers would thus have an incentive not to raise interchange fees above optimal levels.⁹³

As with cost regulation, surcharging has both practical and theoretical problems. The available empirical evidence indicates that merchants, particularly high volume ones, are reluctant to impose surcharges because of (1) the transaction costs of administering the system and (2) the fear of losing customers to competitors who do not surcharge.⁹⁴ Practically speaking, if only a small fraction of merchants will in fact impose surcharges, then this remedy is unlikely to have a significant impact on the level of interchange fees.

From a theoretical perspective, even if merchants were willing to surcharge in sufficient numbers to make a difference, we would not want them to do so. To maximize welfare in a two-sided market, a seller needs a means to discriminate between the two sides.⁹⁵ If merchants added a sur-

charges when they are permitted. EVANS & SCHMALENSEE, *supra* note 2, at 119, 130. At one time, federal law prohibited surcharging for credit card transactions. Although that law expired, some states still prohibit surcharging, though most permit cash discounts. Frankel, *supra* note 18, at 344.

⁹³ Another approach has focused on removing the barriers to point-of-sale strategies that merchants might use to force card issuers to lower the interchange fee. For example, Visa and MasterCard recently settled a class action in which they agreed to drop the requirement that merchants who accept Visa and MasterCard credit cards must also accept their debit cards. *Wal-Mart Stores, Inc. v. Visa U.S.A., Inc.*, 396 F.3d 96 (2d Cir. 2005) (settling class action suit); *see also* EVANS & SCHMALENSEE, *supra* note 2, at 119 (defining honor-all-cards rule as requiring merchants who generally accepted a system's card "to accept every card that carried" that system's logo). The rule was initially intended to prevent merchants from taking cards only if the customer did not have cash as well as from discriminating among types of customers or cards. EVANS & SCHMALENSEE, *supra* note 2, at 119. This new freedom may enable merchants to better control debit card fees, but it would not limit the card issuers' ability to exercise whatever market power they might have in setting credit card interchange fees.

⁹⁴ *EC Report*, *supra* note 2, at 34 & nn.53-54; Evans & Schmalensee, *supra* note 10, at 26-27 (citing empirical data from countries in which the no-surcharge rule does not exist); Marius Schwartz & Daniel R. Vincent, *Same Price, Cash or Card: Vertical Control by Payment Networks*, 1 (Georgetown Univ. Dep't of Econ., Working Paper No. 02-01, Feb. 2002), available at <http://www9.georgetown.edu/faculty/schwarm2/papers/CardsJan02.pdf> ("Even in the absence of formal prohibitions, merchants are often reluctant to set different retail prices depending on the means of payment") (citing Chain Store Age, *Fourth Annual Survey of Retail Credit Trends*, § 2 (Jan. 1994)); Wright, *supra* note 10, at 23; Klein et al., *supra* note 38, at 619-22.

⁹⁵ As Schwartz and Vincent explain, a rule prohibiting surcharging alters the payment card system's "preferred structure of charges between merchants and cardholders. If merchant surcharges to consumers were unrestricted, only the [payment card system's] aggregate share would matter, its division between cardholders and merchants would be irrelevant." Schwartz & Vincent, *supra* note 94, at 3. When surcharging is constrained, however, the payment card system can concentrate "its charges on merchants" and provide rebates to cardholders to induce card use. *Id.*

charge to card transactions they would impose a cost on cardholders at least equal to the benefits that issuers can provide to cardholders from interchange fee income. Surcharging would thus prevent issuers from stimulating card use in circumstances where greater volume is needed to optimize the efficiency of the system. As Rochet and Tirole explain, “the card surcharge in stores raises the issuers’ cost of providing cardholders with a given surplus of using the card and thus inhibits the diffusion of cards.”⁹⁶

To better understand the problem with surcharging, consider a club that offers free admission to women but charges men a cover charge. The club presumably adopts this policy to create an optimal mix of men and women in the club. If bartenders in the club surcharged all drinks consumed by women to recover the amount of the foregone cover charge, the intended benefit of waiving the cover charge would be undone.

Economists have postulated that surcharging can have positive consumer welfare effects in certain circumstances.⁹⁷ The required assumptions, however, do not reflect current market reality. For example, Julian Wright points out that surcharging may increase output and social welfare where it enables cardholders to use cards at merchants who would not otherwise accept cards.⁹⁸ Anecdotally, U.S. merchants in this category appear to get away with surcharging despite the rules against it.⁹⁹ And the near ubiquitous card acceptance in the U.S. indicates that there are few merchants who currently do not accept cards, but would do so if only they could surcharge. If surcharging is unlikely to bring substantial numbers of new merchants into the system, then Wright postulates that surcharging’s dominant effect may be to discourage card use in situations where, were it not for the surcharge, the cardholder would prefer a credit card to other means of payment.¹⁰⁰

Marius Schwartz and Daniel Vincent have undertaken a rigorous analysis of the effects of surcharging on the quantities of purchases, assuming that merchants will accept and certain consumers will use cards irrespective of surcharging.¹⁰¹ They conclude that in a market where card-issuing banks compete vigorously by offering rebates to card users, an assumption that reflects actual market practice, a rule prohibiting surcharges increases consumer welfare, though potentially at the expense of merchants.¹⁰²

⁹⁶ Rochet & Tirole, *supra*, note 54 at 562.

⁹⁷ See Wright, *supra* note 10, at 24.

⁹⁸ *Id.*

⁹⁹ For example, my local independent gas station has surcharged card use for years, and taxing authorities are permitted to charge convenience fees, which have the same effect as surcharging.

¹⁰⁰ Wright, *supra* note 10, at 24.

¹⁰¹ Schwartz & Vincent, *supra* note 94, at 5.

¹⁰² *Id.* at 5-6. Schwartz & Vincent explain:

If competition among the member banks is strong (Bertrand), then—for linear demand—an [no surcharge rule] increases overall consumer surplus regardless of the relative sizes of the

Dennis Carlton and Alan Frankel have argued that surcharging may be appropriate even if it would reduce interchange fees below optimal levels.¹⁰³ Under a system of uniform prices, all customers must share the cost that interchange fees impose on merchants, or as Carlton and Frankel put it, “interchange fees allow credit customers to impose a tax on cash customers.”¹⁰⁴ Even assuming that shifting revenue from merchants to issuers expands payment card system output and benefits cardholders, they question whether consumers as a whole benefit when non-card users are forced to pay a portion of card costs.¹⁰⁵

This assessment of the distribution of card costs assumes that merchants in fact raise prices because of their card acceptance costs. But they might not. If merchants accept cards because card use lowers overall merchant costs on a per transaction basis, then card acceptance could actually lead merchants in a competitive market to lower prices, benefiting cash as well as credit card customers.¹⁰⁶ This could occur if card use provides customers with additional purchasing power, enabling merchants to sell more goods and thus reduce overall prices.¹⁰⁷ Similarly, card use might speed up checkout lines, directly benefiting both card users and non-card users through shorter wait times, and indirectly to the extent faster throughput enables merchants to lower prices compared to what they would have been if the merchant did not accept cards at all.¹⁰⁸

Even if merchants accept cards for strategic reasons—that is, because they believe that they must do so to avoid losing customers to competitive merchants—one still cannot be certain that accepting cards leads merchants to increase prices compared to what they would be if the merchant did not accept cards. To be sure, if a merchant accepts cards for strategic reasons, it may pay more to accept the card than the per transaction benefit. But if failing to accept cards caused the merchant to lose significant sales volume—which of course is the fear that would lead the merchant to accept cards for strategic reasons—then a merchant who did not accept cards might have to charge more per unit of a good to cover its fixed costs as a result of the lower volume caused by its failure to accept cards.

two consumer groups [card users and cash users]. However, as long as the merchant’s benefit from card use is low, the NSR reduces total surplus, because the cross-subsidy to card use biases the mix of payment modes.

Id.

¹⁰³ Wright, *supra* note 10, at 24.

¹⁰⁴ Dennis W. Carlton & Alan S. Frankel, *The Antitrust Economics of Credit Card Networks*, 63 ANTITRUST L. J. 643, 660-61 & n.40 (1995).

¹⁰⁵ *Id.* at 661.

¹⁰⁶ Wright, *supra* note 10, at 20.

¹⁰⁷ Klein et al., *supra* note 38, at 619-20.

¹⁰⁸ Epstein, *supra* note 10, at 578 (asserting that in the payment card market, merchants “are the eager participants and the customers [are] the reluctant ones”).

Moreover, even if payment card acceptance does lead a merchant to raise prices relative to what it would have charged if the merchant did not accept cards, Carlton and Frankel may still be incorrect in concluding that card use unfairly *taxes* non-card customers. To make that claim compelling, one would need to demonstrate that interchange fees are somehow different from a merchant's other costs of doing business, virtually all of which are spread among all consumers. For example, a merchant bears costs in accepting cash as a payment option, including the cost of obtaining change, counting the cash, and making deposits.¹⁰⁹ These costs do not directly benefit credit card customers, yet all consumers must contribute to the merchant's ability to cover its costs of accepting cash. Similarly, a merchant may bear a cost to maintain amenities, such as shopping carts, that only certain customers use. Offering carts to shoppers involves purchasing and maintaining the carts as well as hiring laborers to gather the carts from the parking lot. These costs too are blended into the cost of the merchant's goods and are thus born in part by shoppers who never use carts. One could thus argue that because of uniform pricing, every subgroup of customer effectively imposes a portion of the merchant's cost of doing business on other groups of customers who do not benefit from that particular merchant expenditure.

Unless one was certain that accepting cards is more expensive for merchants than accepting other forms of payments, the direction of the "tax" is uncertain. Studies of the costs of accepting different forms of payment have yet to reach definitive results on the relative cost levels.¹¹⁰ Even if accepting cards does increase merchant costs, one would need a theory to distinguish this expense from all other merchant expenses that benefit a particular subgroup of consumers. As an economic matter, current data on merchant costs is insufficient to support such a claim.¹¹¹ Discrimination

¹⁰⁹ Muris, *supra* note 10, at 538. Muris explains that:

Cash, for instance, imposes costs on retailers and consumers that electronic payment systems do not. One example is the labor cost associated with counting cash and reconciling the cash register drawer. As labor costs increase, the cost of cash payments to retailers becomes more expensive relative to electronic payments. In addition, cash has a higher risk of theft and loss for both consumers and merchants (from employee malfeasance). The costs associated with collecting and transporting cash safely, most notably armored cars, do not exist for payment cards.

Id.

¹¹⁰ There is some evidence that cash may, in some circumstances, be a higher cost payment method than cards. See Daniel D. Garcia Swartz, Robert W. Hahn & Anne Layne-Farrar, *The Move Toward a Cashless Society: A Closer Look at Payment Instrument Economics*, 5 REV. OF NETWORK ECON. 175 (2006), available at http://www.rnejournal.com/arch_vol5_issue2_june_06.html. Although describing this study as "instructive," Evans and Schmalensee argue that it falls "well short of a rigorous overall assessment of payment system performance." Evans & Schmalensee, *supra* note 10, at 33; see also Rysman, *supra* note 33.

¹¹¹ Credit cards may differ from other merchant costs, however, because the consumers who cannot use cards are not a random sample. Those with poor credit, who are disproportionately low income and minority households, are significantly less likely to have credit cards than affluent white families. See

against customers who pay in cash thus does not provide a basis for encouraging merchants to surcharge credit card transactions.

IV. INDUSTRY ORIGINS AND INTERCHANGE FEES

The standard history of the payment card associations describes interchange fees as *essential* to the early associations.¹¹² This section reviews that history and proposes an alternative account in which the fee was adopted as a hedge against the uncertainty of unsecured consumer lending. It then outlines recent changes in the industry that are consistent with this explanation for interchange fees.

A. *History of the Interchange Fee in the Payment Card Industry*

From early in their history, credit card systems imposed an interchange fee that shifted revenue from merchants to issuers. Commentators have argued that this practice would only have arisen because issuers needed merchant-side revenue to support the issuance of a sufficient number of cards to make the system successful.¹¹³

But there is another explanation. The Visa and MasterCard systems were never structured exclusively as payment systems. Instead, they were designed from the outset as consumer lending systems that used a payment system to generate receivables. Interchange fees may thus have originally functioned as a hedge against the risks attendant to an entirely new form of unsecured consumer lending. Rather than being an essential component of an efficient payment card system, this new account sees interchange fees as something akin to the venture capital necessary to get the consumer credit system rolling. As banks learned to profitably extend the revolving consumer credit made possible by credit cards, the need for interchange could have withered away.

1. Payment Systems as Credit Devices

Credit card systems are often described as a means to transact. Where we once relied on barter, coinage, bank notes, checks, and Federal Reserve

U.S. CENSUS BUREAU, STATISTICAL ABSTRACT OF THE UNITED STATES: 2004-2005, 751 tbl.1191, available at <http://www.census.gov/prod/2004pubs/03statab/banking.pdf>. As a result, shifting revenue from the merchant side to the issuer side may harm this group of non-card-using customers even if the revenue shift is economically optimal. This sort of non-economic inter-customer utility comparison is not the usual stuff of antitrust, and is not addressed in this Article.

¹¹² See *supra* Part I.B.2

¹¹³ *Id.*

currency, we now rely in large part on a credit card system. This analogy ignores, however, a critical distinction between credit cards and virtually all earlier payment systems. Only credit cards arose as a way to pay through the *extension of credit*.

Despite banks' traditional function as lenders, they came to the payment card industry only reluctantly. Many have emphasized that prior to the 1980s, banking regulations made it difficult for individual banks to compete in issuing or acquiring outside of their local market.¹¹⁴ An equally important reason for the banks' reluctance, however, may have been their apprehension about extending revolving credit, particularly without a promise of interest from the first day the money was lent.¹¹⁵

Until the 1950s, consumer revolving credit through banks was virtually unknown,¹¹⁶ and when revolving consumer credit accounts began to appear in the form of letters of credit or checking accounts with overdraft protection, interest accrued from the day the line of credit was accessed.¹¹⁷ Left to their own devices, banks may not have strayed "from their own long-standing practice of insisting that they be compensated for the use of money for the entire period that money is outstanding."¹¹⁸ Fortunately for consumers, banks had to compete with store credit accounts, as well as travel and entertainment charge cards.

Merchants had long extended a month or two of interest-free credit to their regular customers.¹¹⁹ Over time, merchants began to extend longer lines of credit. If a consumer paid the bill within the traditional 60-day period, no interest would be due. But if the customer required additional time, the merchant would charge interest.¹²⁰

By the 1950s, companies such as Diners Club and American Express developed travel and entertainment charge card networks. These systems extended the traditional merchant account model—which had been limited to consumers with whom the merchant had developed strong ties¹²¹—to

¹¹⁴ EVANS & SCHMALENSSEE, *supra* note 2, at 166; Baxter, *supra* note 43, at 574. In requesting a business review by the United States Department of Justice, a group of banks explained that the necessary scope and attendant risk of a payment card system required a scale achievable only by a consortium of banks. Application by New England Bankcard Association, Inc. to the Department of Justice for a Business Review of Proposed Activity 13-14 (Feb. 18, 1972) [hereinafter *NBE Bus. Rev. App.*].

¹¹⁵ See *NBE Bus. Rev. App.*, *supra* note 114, at 6-8.

¹¹⁶ *Id.* at 7.

¹¹⁷ *Id.* at 7-8.

¹¹⁸ *Id.* at 11-12.

¹¹⁹ Baxter, *supra* note 43, at 572 ("For centuries merchants have extended short-term, interest-free credit to customers whose patronage is highly valued."). Under the traditional account, a merchant would allow its best customers to pay on a 30-day credit account. The merchant would then bill the customers, providing an additional 30 days to pay. No interest was charged. *NBE Bus. Rev. App.*, *supra* note 114, at 8-10.

¹²⁰ *NBE Bus. Rev. App.*, *supra* note 114, at 8-10.

¹²¹ Baxter, *supra* note 43, at 572.

restaurants, airlines, hotels, and rental car companies that generally served a more geographically disbursed and less regular clientele.¹²² By agreeing to pay the merchant promptly, freeing it from the need to extend credit, bill the customer, and collect the funds, the payment card companies convinced merchants to accept a discounted fee for the service.¹²³ These companies also charged their cardholders a set annual fee regardless of the amount of usage.¹²⁴ Like store accounts, the travel and entertainment card companies extended interest free credit for a month or two, depending on the dates of the charge and bill. But they did not offer the option to delay payment over longer periods and pay interest.

Additionally, in the late 1950s and early 1960s, real incomes grew and travel patterns expanded, increasing demand for payment mechanisms outside one's home area.¹²⁵ At the same time, advances in data processing and electronic communications reduced the costs of credit assessment, billing, and collection.¹²⁶ As private companies began to meet these needs, banks likely felt compelled to compete for this consumer lending business.¹²⁷

By the late 1950s, banks began experimenting with payment card programs.¹²⁸ Because most banking at that time was local in nature, single banks were limited both legally and economically in their ability to attract merchants outside their area.¹²⁹ Over the next decade, banks addressed this problem by forming two nationwide consortia to sign merchants and issue cards on systems that could operate nationwide.¹³⁰ One association was formed under the umbrella of the Bank of America, which licensed the right to issue and acquire for its BankAmericard system.¹³¹ This association evolved into Visa.¹³² The other association, originally known as Inter-bank, became Master Charge and later MasterCard.¹³³

These associations combined the interest-accruing revolving-credit option provided by merchant accounts with the merchant discount model developed by the travel and entertainment card companies. In order to com-

¹²² EVANS & SCHMALENSEE, *supra* note 2, at 53-61; Baxter, *supra* note 43, at 573.

¹²³ EVANS & SCHMALENSEE, *supra* note 2, at 53-61; Baxter, *supra* note 43, at 573.

¹²⁴ See EVANS & SCHMALENSEE, *supra* note 2, at 53-61; Baxter, *supra* note 43, at 573.

¹²⁵ See Baxter *supra* note 43, at 574.

¹²⁶ *Id.*

¹²⁷ *NBE Bus. Rev. App.*, *supra* note 114, at 11 ("Without doubt, a primary motivation for the issuance of bank credit cards was to permit banks to compete with stores in financing the purchase of merchandise . . .").

¹²⁸ *Id.* at 11-12 ("As late as 1965, only a handful of banks were issuing credit cards in any volume.").

¹²⁹ EVANS & SCHMALENSEE, *supra* note 2, at 166; Baxter, *supra* note 43, at 574.

¹³⁰ EVANS & SCHMALENSEE, *supra* note 2, at 61-70.

¹³¹ *Id.*; Baxter, *supra* note 43, at 574-75. Banking regulations at the time limited interstate banking, requiring Bank of America to partner with other banks in order to form a nationwide network. Baxter, *supra* note 43, at 574; Muris, *supra* note 10, at 531.

¹³² Baxter, *supra* note 43, at 575.

¹³³ *Id.*; EVANS & SCHMALENSEE, *supra* note 2, at 66.

pete, however, the banks had to continue the practice of providing an interest free period of credit.¹³⁴

Several factors combined to give banks a significant advantage over both unitary systems and individual-merchant card programs. First, banks already had relationships with virtually all merchants and reasonably affluent consumers to which the banks could market the payment system. The unitary payment card systems, such as Diners Club, had to strike up entirely new relationships. Second, as nominal interest rates rose in the late 1960s, interest costs became more significant, and banks had a decided advantage in managing those costs.¹³⁵ Third, consolidating transactions from numerous merchants into a single consumer account created scale economies for banks that no individual merchant could achieve.¹³⁶

2. The Adoption of the Interchange Fee: Standard History

During this early period, the predecessors of the Visa and MasterCard systems decided that the acquiring bank needed to pay a portion of the merchant discount that it collected for each transaction to the issuing bank.¹³⁷ These first interchange fees have been explained by commentators as evidence that the banks realized that the systems would be more successful if merchants paid a higher share of the cost of the system than cardholders. As Bill Baxter, then Assistant Attorney General for the Antitrust Division explained, “[b]ecause the revenue of each [issuer and acquiring bank] probably will not equal its cost stream, one would expect to observe some side payment that will bring the net revenue stream of each bank, after the side payment, back into the same proportion with respect to its cost stream as the proportion between total revenue and total bank costs.”¹³⁸ Commenta-

¹³⁴ *NBE Bus. Rev. App.*, *supra* note 114, at 11-12 (“A by-product of the effort by banks to compete with stores in extending credit to purchase merchandise was the belief of banks originating bank credit cards that they must follow the practice of those stores which included a free period without the imposition of finance charges.”).

¹³⁵ Baxter, *supra* note 43, at 574.

¹³⁶ *Id.*

¹³⁷ EVANS & SCHMALENSEE, *supra* note 2, at 153-55. Indeed, in the early days of the BankAmericard system, acquirers were supposed to pay 100% of the merchant discount to the issuer.

¹³⁸ Baxter, *supra* note 43, at 578. Evans and Schmalensee have asserted that “[w]ithout an agreement on interchange fees, it is unclear [whether] a cooperative card system could function successfully.” EVANS & SCHMALENSEE, *supra* note 2, at 153. They have also argued that without interchange:

[T]here would be no way for the [acquiring] bank to be sure that it will be reimbursed at all (let alone how much) for a transaction at one of its enrolled merchants. Yet, once a transaction has taken place, the only way the merchant can be repaid is by the issuer (which is the only bank with any relationship to its cardholder). For any given transaction, the issuer (in the absence of an ‘interchange’ rule) is a monopolist buyer of the merchant bank’s transaction paper. By assuring the merchant banks of their right to transfer the resulting paper to issuing banks at a specified price, the system eliminates both the merchant banks’ uncertainty and the cost of negotiating between the issuing and merchant banks.

tors question what other reason these nascent systems would have for adopting the interchange fee, given that they obviously had no market power and thus no incentive to adopt an inefficient fee that would have hindered the development of the industry.¹³⁹ To be sure, the card issuers took on substantial costs. Merchants had borne the risk of fraud and credit losses when consumers wrote checks.¹⁴⁰ By contrast, issuers assumed these risks for payment card transactions.¹⁴¹ Also, when a consumer used a check, the bank could settle quickly by removing funds from the consumer's own checking account.¹⁴² A payment card issuer, by contrast, took on a float period¹⁴³ and suffered significant losses in the early years.¹⁴⁴ On the income side, card issuing banks rarely charged customers who did not run bal-

David S. Evans & Richard Schmalensee, *Economic Aspects of Payment Card Systems and Antitrust Policy Toward Joint Ventures*, 63 ANTITRUST L. J. 861, 890 (1995).

¹³⁹ In his famous 1983 account of the origin of the payment card systems, Bill Baxter, then Assistant Attorney General for the Antitrust Division, wrote:

[I]t was overwhelmingly improbable that the revenue stream from [merchant] to [merchant] bank or from [cardholder] to [cardholder] bank would equal the costs of the subset of activities that a particular bank was required by the technology of the payment system to perform; thus some redistribution of those revenues between [merchant] bank and [cardholder] bank was likely to be necessary for the payment system to compete effectively with alternative mechanisms.

Baxter, *supra* note 43, at 575. More recently, Tim Muris, former head of the FTC's Bureau of Competition, wrote:

Thus, the essential structure, comprising a merchant discount that provided revenues for the acquirer bank and included the interchange fee, was in place from almost the very beginning, long before Visa and MasterCard possibly had any market power. In fact, the early emergence of the interchange fee and its continued presence in the payment card industry testify to the inherent logic of interchange fees in equilibrating the two sides of the market.

Muris, *supra* note 10, at 532. Others have made similar points. *See, e.g.*, Epstein, *supra* note 10, at 585.

See Klein et al., *supra* note 38, at 599.

¹⁴⁰ Baxter, *supra* note 43, at 578.

¹⁴¹ *Id.* at 575.

¹⁴² *Id.* at 578.

¹⁴³ *Id.* at 577-78.

¹⁴⁴ From 1992–2001, Visa issuers wrote off \$114 billion in credit card charges as uncollectible. EVANS & SCHMALENSEE, *supra* note 2, at 102. Banks suffered substantial losses in the early 1970s, and from 1974 through 1980 they continued to earn a considerably lower return on assets for credit card lending than for other forms of lending. *Id.* at 72-74. In 1972, for example, a consortium of banks forming part of the Interbank Association informed the Department of Justice:

that the cost of operating these [card] programs and the resulting net losses suffered by the banks have been very substantially higher than anticipated. In spite of the use of the most modern techniques to avoid fraud losses, there have been substantial fraud losses resulting from unauthorized use of lost or stolen cards. In spite of increasingly conservative practices in selection of existing customers to whom cards would be sent, there have been substantial credit losses. More important than either of these causes, however, has been the fact that the establishment of multi-bank, multi-merchant, regional and national interchange systems has been substantially more complex and expensive than even the most expensive forecasts anticipated.

NBE Bus. Rev. App., *supra* note 114, at 20-21.

ances,¹⁴⁵ and banks struggled as consumers tended to make small purchases and pay during the free period.¹⁴⁶

Without some form of transfer payment from the acquiring side to the issuing side, many commentators argue that banks might have failed to issue cards in sufficient numbers to enable the system to operate profitably.¹⁴⁷ Interchange fees were considered to be that essential means of transfer, and merchants were quite willing to pay them in exchange for the benefits the banks provided.¹⁴⁸

3. Adoption of the Interchange Fee: An Alternate View

A closer look at the choices banks made during the early years indicates that other fee structures were possible and, in all events, the initial importance of shifting revenue from merchant to issuer did not necessarily persist as the market matured. First, the high-issuer-cost rationale begs the question of why card issuers took on the risk of credit and fraud losses for payment cards when they did not for checks. Banks could require merchants to bear the cost of fraud and credit losses directly, especially given that merchants were going to pay these costs indirectly through interchange fees.¹⁴⁹

Second, even assuming some differences in costs and revenues across the issuing and acquiring markets, the need for a balancing transfer payment was not inevitable. Many co-dependant markets exist without transfer payments. For example, the profitability of any manufactured device depends in part on service and replacement part markets. The market for the device and for service and parts are unlikely to be equally profitable, yet transfer payments do not necessarily arise.¹⁵⁰ One business is simply more profitable than the other. The need for a transfer payment would become

¹⁴⁵ Baxter, *supra* note 43, at 579 (explaining that “only a few card-issuing banks had imposed either transaction fees or periodic ‘membership’ fees on their cardholders”; pre-1980 laws prohibited banks from paying interest on demand deposit accounts, making those accounts extremely attractive to banks; and banks thus used credit card accounts as a competitive device to attract demand deposit accounts).

¹⁴⁶ *NBE Bus. Rev. App.*, *supra* note 114, at 21, 33-34.

¹⁴⁷ EVANS & SCHMALENSEE, *supra* note 2, at 153 (“Without an agreement on interchange fees, it is unclear [whether] a competitive card system could function successfully.”); Baxter, *supra* note 43, at 574-82.

¹⁴⁸ Baxter, *supra* note 43, at 579 (recognizing that pre-1980, a time when payment card systems had no market power, merchants bore almost the entire cost of the payment system, indicating that they must have derived benefits therefrom).

¹⁴⁹ Merchants bore those risks with respect to checks, but banks decided to take on those risks when they introduced credit cards. EVANS & SCHMALENSEE, *supra* note 2, at 119.

¹⁵⁰ Original equipment and replacement part markets bear many of the same characteristics of two-sided markets as they are described in the economic literature. An increase in price (and reduction in output) in either market will have an effect on the other.

necessary only if one of the two markets was so unprofitable that it could not support itself. Neither card issuing nor acquiring have proven to be unprofitable.

Third, one might argue that, while not essential, a transfer payment would benefit the card system by encouraging the additional card issuance needed to achieve optimally efficient scale. The need to balance the costs among issuers and acquirers for that purpose, however, would be expected to arise where particular banks participated in only one side of the system and therefore failed to internalize the costs of the other side. In the early days, most banks participated in both sides.¹⁵¹ One might thus reasonably expect a bank to recognize that card issuance was critical to the success of the system, even if less profitable than the acquiring business.

Issuing banks might theoretically seek to free-ride on the system. If a particular bank concentrated resources more heavily in the acquiring side, while under-funding card issuing, the cost savings from reduced card issuing would accrue entirely to the issuing bank. System losses from reduced volume (and thus merchant fees), however, would be spread system wide.¹⁵²

This prisoner's dilemma scenario hardly seems inevitable. Given that cardholders were essential to the continuation of the profitable acquiring business, a rational bank would have been unlikely to adopt a free-riding strategy absent an interchange fee. Moreover, if free-riding concerns were the cause of the interchange fee, one might expect to observe the fee arising as a response to evidence of bank flight from card issuing. In fact, the interchange fee was an initial ingredient in the association model.¹⁵³

Fourth, annual cardholder fees, which American Express and other travel and entertainment card issuers had always charged,¹⁵⁴ as well as the interest bearing nature of the revolving credit accounts, might reasonably have been expected to generate a profitable revenue source on the issuing side. In the early days, banks chose not to charge cardholder fees other than interest on revolving balances,¹⁵⁵ and perhaps that contributed to the decision to adopt an interchange fee.¹⁵⁶ For present purposes, however, the important point is that banks chose to create a system in which non-interest issuing-side revenue would be low and speculative, while costs would be high.

Presumably, banks made this choice because they saw great potential in the revolving credit business if they could convince merchants to accept,

¹⁵¹ EVANS & SCHMALENSEE, *supra* note 2, at 72.

¹⁵² Baxter, *supra* note 43, at 576-77; Rochet & Tirole, *supra* note 54, at 550.

¹⁵³ EVANS & SCHMALENSEE, *supra* note 2, at 153-54.

¹⁵⁴ *Id.* at 59, 151.

¹⁵⁵ *Id.* at 62; Baxter, *supra* note 43, at 579 ("Before 1980 only a few card-issuing banks had imposed either transaction fees or periodic 'membership' fees on their card holders . . .").

¹⁵⁶ In the 1980s, banks began to charge cardholder fees and reduced interchange fees to take account of some of this additional issuer side revenue. EVANS & SCHMALENSEE, *supra* note 2, at 154-55.

and consumers to use cards. This business strategy worked, but that success does not establish that interchange fees are essential to an efficient card system.¹⁵⁷ Interchange fees may instead have been originally adopted to ensure a revenue flow to issuers as they came to terms with the potentially profitable, but historically unsettling business of extending revolving credit with a grace period.¹⁵⁸ Now that card-based lending has proven to be immensely profitable, the interchange fees that may have been essential to get the system rolling might now be an unnecessary anachronism that simply enables issuers to exercise market power over merchants.¹⁵⁹

At one level, it makes little difference why, decades ago, banks adopted the interchange fee. Some commentators, however, have cited the fee's origination in the systems' earliest days when banks surely had no market power as evidence that interchange must be an efficient component of a payment card system.¹⁶⁰ The persuasive power of that argument is reduced significantly once one recognizes that banks chose to distribute costs in a particular way, and may have needed to shift revenue only until interest income became sufficient to make the issuing business profitable.

B. *Interchange Fees in the Payment Card Industry Today*

Over the last 40 years, payment card systems have changed dramatically from a risky new business model to an extremely profitable one.¹⁶¹ This subsection summarizes the current state of the acquiring and issuing businesses, and demonstrates that interchange fees are not a cost-balancing mechanism.

¹⁵⁷ Indeed, some early regional bank payment card associations did not use an interchange fee. *See id.* at 66.

¹⁵⁸ Evans and Schmalensee discuss the struggle that many banks had in turning a profit with their credit card businesses in the early days of the associations. *Id.* at 71-74. In fact, as would be expected given the account offered in this Article, interchange fees declined over the first two decades during which costs decreased and issuer revenue increased. *See id.* at 155.

¹⁵⁹ Curiously, when banks assess interchange fees, they purport to balance the costs and revenues of the payment system. They excluded revenue generated by the credit extension business, which they see as a separate business of the card-issuing bank. *See id.*, at 154-55. Only a portion of non-interest cardholder fees and none of the interest revenue are attributed to the payment system. Since the payment system makes the credit-extending business possible, however, this separation is but one way to view the business, not an inherently necessary one. *See Baxter, supra* note 43, at 580-82.

¹⁶⁰ *See supra* note 137 and accompanying text.

¹⁶¹ Both Visa and MasterCard have thousands of bank members worldwide. *United States v. Visa U.S.A., Inc.*, 344 F.3d 229, 235 (2d Cir. 2003).

1. Merchant Acquiring

Merchant acquiring, the easy half of the business in the 1970s, was abandoned by many of the largest issuers in the 1980s and 1990s; large transaction processors and independent sales organizations took over.¹⁶² Scale economies in the highly competitive merchant acquiring and processing business have led to dramatic cost reductions, intense competition, and a high degree of concentration.¹⁶³ As one commentator has explained, undifferentiated product offerings have led to “brutal competition between acquirers and . . . the exercise of leverage by major merchants.”¹⁶⁴ As a result, the portion of the merchant discount retained by acquirers has fallen.¹⁶⁵

Despite this intense competition, merchants have little leverage with respect to the interchange fee portion of the merchant discount fee. A merchant’s only option has been to refuse to accept all of a system’s cards. Given that many consumers prefer to use cards and other merchants are likely to continue accepting them, most merchants feel compelled to continue to accept at least Visa and MasterCard, which are the two largest brands. As the CEO of an internet-based card-accepting merchant recently bemoaned, “[r]etailers are beholden to credit card companies. We’ve moved so far to an e-commerce model that if I don’t accept credit cards, I’m out of business.”¹⁶⁶

¹⁶² EVANS & SCHMALENSSEE, *supra* note 2, at 249. Those large issuers that remain in the acquiring business operate those businesses entirely separately from their issuing business and look to acquiring merely as a means to establishing other banking relationships with merchant customers. *Id.* at 17, 259. The large processing companies operate at a volume that is orders of magnitude different from the remaining bank operations. For example, First Data and its large partner banks have over \$800 billion dollars in annual transaction volume. The rest of the top eight acquirers have about \$700 billion dollars. THE NILSON REPORT, No. 854, at 7-8 (Apr. 2006), available at <http://www.ccpa.com/Resources/documents/doc854c.pdf>. The remainder of the acquiring industry transacts about \$200 billion dollars annually. *Id.*

¹⁶³ In mid-2006, one processor was heavily advertising that it could provide processing services for three cents a transaction. Digital Transactions, Vol. 3, No. 4 (May 2006); Balto, *supra* note 2, at 218-21 (describing how changes in the industry reduced costs); EVANS & SCHMALENSSEE, *supra* note 2, at 18, 249-51, 258-63 (showing that top 10 acquirers account for 78% of the volume).

¹⁶⁴ Chang, *supra* note 14, at 46 (quoting Charles Marc Abbey, *National Merchants Revisited*, CREDIT CARD MANAGEMENT, Dec. 27, 2002); Rochet & Tirole, *supra* note 54, at 552 (“The acquiring side involves little product differentiation as well as low search costs and is widely viewed as highly competitive.”).

¹⁶⁵ EVANS & SCHMALENSSEE, *supra* note 2, at 261 (“[c]ompetition, scale economies, and rapid reductions in data processing and telecommunications costs have come together to reduce the net merchant discount—the difference between the total merchant discount and the interchange fee, which goes to issuers—that merchants pay acquirers for their services”); see Balto, *supra* note 2, at 218-19, 223 (describing how changes in the industry reduced costs); Lyon, *supra* note 2.

¹⁶⁶ Martin H. Bosworth, Credit Card Companies Rocked by New Merchant Law Suits, CONSUMER AFFAIRS.COM, Sept. 27, 2005, http://www.consumeraffairs.com/news04/2005/credit_card_

2. Card Issuing

Card issuing remains an integral part of the banking industry and has become perhaps the most profitable sector of retail banking.¹⁶⁷ Despite apparent competition on the issuing side of the business, the largest issuers have maintained relatively strong profitability,¹⁶⁸ because cardholders are heterogeneous, and issuers have successfully differentiated their offer-

fee_suits_wrap.html; Muris, *supra* note 10, at 522 (“Most merchants . . . cannot accept just one major card because they are likely to lose profitable incremental sales if they do not take the major payment cards”).

¹⁶⁷ The recently released European Commission Report reached this conclusion with respect to card issuers in Europe. *EC Report*, *supra* note 2, at 76 (“The issuing of credit cards is very profitable . . . Interchange fees appear to magnify these profits.”); *id.* at 77 (“[t]he high and persistent profit ratios found by this inquiry in relatively mature markets, together with other evidence collected on entry barriers, suggest the existence and exercise of market power in these markets.”); *id.* at 141 (“There seems to be a consistent pattern showing that in countries with higher interchange fees issuers enjoy also higher level [sic] of profitability.”); *id.* at 141-42 (finding that interchange makes issuing a highly profitable activity, while leaving acquiring only marginally profitable).

There has long been evidence of high profitability among card issuers in the United States as well. EVANS & SCHMALENSEE, *supra* note 2, at 16 (stating that Citigroup earned 20% of its profit from issuing credit cards, nearly as much as its entire retail banking unit); Lawrence M. Ausubel, *The Credit Card Market, Revisited*, Mimeo at 1, (Univ. of Md., July 1995) (noting that despite increased competition on interest rates “there appears to be no substantial erosion in the extranormal accounting returns reported by credit card issuers”); Lawrence M. Ausubel, *The Failure of Competition in the Credit Card Market*, 81 AM. ECON. REV. 50, 56-68 (1991) (citing data indicating high profitability in card issuing throughout the 1980s and offering the explanation that “consumers systematically underestimate the extent of their borrowing on credit cards.”). Perhaps the best evidence of the profitability of credit card programs by large issuers in the United States is that overwhelmingly these issuers have no other banking relationship with the cardholder. EVANS & SCHMALENSEE, *supra* note 2, at 215 (only 20% of card issuing relationships are augmented with other banking relationships); Chang, *supra* note 14, at 40-41 (citing FED. RESERVE BD. OF GOVERNORS, SURVEY OF CONSUMER FINANCES, Federal Reserve Board of Governors (2003)). The huge numbers of solicitations mailed to potential cardholders, though a form of competition, also reflect high profitability. See *United States v. Visa U.S.A., Inc.*, 163 F. Supp. 2d 322, 331-34 (S.D.N.Y. 2001) (“In 1999 alone, issuers sent out 2.9 billion direct mail solicitations to households in the United States, an average of 2.4 solicitations per month to each household. Additional information is available through newspapers, magazines, the Federal Reserve Board survey and the Internet.”). An illustrative comparison is long distance telephone communications. When that business was highly profitable, consumers observed a plethora of solicitations. Although the sector remains competitive, the drop in profitability coincided with a drop in the volume of solicitations. See Lawrence M. Ausubel, *Adverse Selection in the Credit Card Market* 1-2 (Univ. of Md., Dep’t of Econ., Working Paper, June 17, 1999), available at <http://www.ausubel.com/creditcard-papers/adverse.pdf>.

¹⁶⁸ EVANS & SCHMALENSEE, *supra* note 2, at 237 (showing a chart with rates of return for credit card lending before tax earnings as a percentage of outstanding balances for Visa issuers from 1971–2001).

ings.¹⁶⁹ Where acquirers are the wheat farmers of the card industry, competing on price and little else, issuers are the restaurants.¹⁷⁰

Over time, card holding has exploded. In 1970, 16 percent of households had cards.¹⁷¹ By 1986, 55 percent held cards, and by 2003 the number stood at 73 percent with the average household holding four or five cards.¹⁷² Transaction volume has also increased at steadily high rates for more than three decades.¹⁷³ Between 1986 and 2000, the percentage of consumer expenditures in the U.S. on payment cards grew from three percent to 25 percent.¹⁷⁴ And while many banks still market payment cards to their own customers, the independent profitability of card issuing is confirmed by the banks' intense pursuit of customer relationships based entirely on cards. Less than 20 percent of credit cards are issued by banks to consumers with whom they have a pre-existing relationship.¹⁷⁵

As technology has improved and transaction volume soared, one might expect per transaction costs, and thus interchange fees, to fall.¹⁷⁶ Unlike the

¹⁶⁹ *Id.* at 217-28; Rochet & Tirole, *supra* note 54, at 552 n.12 (citing innovative activities such as frequent user programs, co-branding, and bill payment services as possible explanations).

¹⁷⁰ EVANS & SCHMALENSEE, *supra* note 2, at 223 (“[I]f a bank raised its late payment fee by a few percentage points, for instance, it would likely retain most of its customers.”).

¹⁷¹ *United States v. Visa U.S.A., Inc.*, 163 F. Supp. 2d 322, 334 (S.D.N.Y. 2001).

¹⁷² EVANS & SCHMALENSEE, *supra* note 2, at 95; FED. RESERVE BD., THE PROFITABILITY OF CREDIT CARD OPERATIONS OF DEPOSITORY INSTITUTIONS 4 (1999), available at <http://www.federalreserve.gov/boarddocs/rptcongress/creditcard/1999/default.htm>.

¹⁷³ EVANS & SCHMALENSEE, *supra* note 2, at 84 (noting the steady rise in percentage of transactions from about 2 percent to 25 percent); *id.* at 233 (noting double annual transaction volume increases from the early 1970's through the 1990's).

¹⁷⁴ Evans & Schmalensee, *supra* note 10, at 3. And the growth in other countries was even more dramatic. *Id.*

¹⁷⁵ EVANS & SCHMALENSEE, *supra* note 2, at 215; see also Chang, *supra* note 14, at 40-41 (citing FED. RESERVE. BD. OF GOVERNORS, SURVEY OF CONSUMER FINANCES (2003)).

¹⁷⁶ *Cf.* Baxter, *supra* note 43, at 559-65 (explaining how societal and industrial changes, most importantly the rise in clearinghouses, led to shifts in the cost structure of check transactions). Advances in fraud detection provide an illustrative example. In the early decades of card issuance, fraud losses were extremely difficult to control. See *NBE Bus. Rev. App.*, *supra* note 114, at 20-21. Modern authorization and fraud detection techniques have been very successful in reducing those losses. Balto, *supra* note 2, at 218-19 (“Electronic transactions and authorizations means that the card issuing bank knows almost instantly whether or not a transaction is valid.”); *id.* at 221 (describing how changes in the industry reduced costs). Card issuers in the United States thus resisted the move to smart cards, which can be used to control fraud, on the ground that less expensive fraud-control measures are available. Because telecommunications services have been much less expensive in the United States than elsewhere, significant fraud protection could be obtained relatively inexpensively through on-line authorization using existing magnetic stripe readers. In France, in contrast, where telecommunications was more expensive, issuers had a stronger business case in favor of installing new chip readers that could authorize transactions off-line. EVANS & SCHMALENSEE, *supra* note 2, at 7-8; see *United States v. Visa U.S.A., Inc.*, 163 F. Supp. 2d 332, 351-52 (S.D.N.Y. 2001). But that may not have been the entire story. By refusing to permit the associations to require smart card technology that would have extended excellent fraud protection to all issuers, the largest issuers were able to design on-line fraud protection systems that were not generally available and in this way to differentiate themselves from other issuers.

non-interchange fee portion of the merchant discount, however, between 1995 and 2005, interchange fees rose more than 25 percent.¹⁷⁷

One might contend that interchange fees have risen despite lower processing costs because banks have reduced prices to cardholders. Anecdotally, credit worthy individuals observe a plethora of low interest and reward paying credit cards.¹⁷⁸ When system-wide costs are considered, however, the notion that interchange fee increases have been completely offset by decreasing cardholder costs is quite difficult to support. Cardholder costs actually increased through the year 2000 during periods when interchange fees rose, and recent studies in other countries suggest that cardholder fees do not vary in anything approaching lock step with interchange fees.¹⁷⁹

The counter-intuitive recent increase in interchange fees may be a product of the large issuing banks' decisions to abandon acquiring as a significant profit center.¹⁸⁰ Since acquiring profits are no longer important to the banks, they may have transformed the interchange fee from a cost-balancing mechanism as the traditional history would have it, or as a hedge against uncertain credit losses as this Article has suggested, to a means of moving revenue available as a result of market power over merchants from

¹⁷⁷ Lyon, *supra* note 2 (explaining that interchange “fees for credit cards have risen on five occasions since 1994, most recently in April 2005”). Although merchant discount rates fell from about 2.7% to 2.0% from 1982 through 1994, merchant discounts then rose to 2.3% by 2001, EVANS & SCHMALENSEE, *supra* note 2, at 126, despite continued streamlining of the acquiring business. See Balto, *supra* note 2, at 216 (describing interchange fee wars in the late 1990s, which unlike typical price wars involved an increase in fees).

¹⁷⁸ See Appendix I (listing credit card offers mailed to my house during approximately one month in the fall of 2006).

¹⁷⁹ In the United States, the cost of credit cards to cardholders actually increased between 1991, when the tax deduction for credit card interest was completely phased out, and 2000. EVANS & SCHMALENSEE, *supra* note 2, at 235 (showing a dramatic drop over the last five years leaving cards about 20 percent cheaper today than they were in 1991). The recent European Commission study of the European card systems similarly casts doubt on the interchange fee-cardholder fee relationship. *EC Report*, *supra* note 2, at 52. Based on an econometric estimation controlling for variables that may affect cardholder fees, the Commission determined that only 25 percent of interchange fee increases are actually passed on to cardholders. *Id.* at 56. The Commission reports that:

The empirical evidence shows that if the interchange fee increases by 1 Euro only 25 cents are passed on to consumers in lower fees. This result challenges the hypothesis advanced by some industry participants and the economic literature that an increase in interchange fees exactly equals a decrease in cardholder fees.

Id. (footnote omitted).

Cf. Fabrizio Lopez-Gallo & Jose L. Negrin, *Effects of Interchange Fee Changes on Merchant Service Fees and Cardholders' Benefits* 19 (unpublished manuscript, on file with the author, Apr. 18 2005), available at <http://ssrn.com/abstract=707133> (finding ambiguous the extent that changes in the interchange fee will affect cardholder benefits with the effect depending in part on the importance each side places on bank profits).

¹⁸⁰ Banks remain in the acquiring business primarily as a way to cultivate customer relationships, leaving whatever profit is to be had to large processors with significant economies of scale. EVANS & SCHMALENSEE, *supra* note 2, at 259-61.

the competitive acquiring side, which could not retain it, to the more differentiated issuing side that could.¹⁸¹

V. LEGAL ANALYSIS OF THE INTERCHANGE FEE

This section explains the basic distinctions between economic and legal antitrust analysis and then summarizes and critiques the existing legal analysis of payment card interchange fees.

A. *The Differences Between Legal and Economic Antitrust Analysis*

Antitrust legal analysis differs from economic analysis in important ways. Economic analysis explores the anticipated outcome of rational behavior under a bounded set of assumptions to determine whether an unregulated market can be expected to optimize consumer welfare.

Antitrust legal analysis is both simpler and more complex. It is simpler in that it rests on a unitary assumption that competition among market participants will maximize consumer welfare.¹⁸² “Even assuming occasional exceptions to the presumed consequences of competition,” the Supreme Court has explained, “the statutory policy precludes inquiry into the question whether competition is good or bad.”¹⁸³ Although economic analysis can take account of the possibility of harmful competition, the law cannot: “The heart of our national economic policy long has been *faith in the value of competition*,”¹⁸⁴ and therefore, “the Rule of Reason does not support a defense based on the assumption that competition itself is unreasonable.”¹⁸⁵

Legal analysis is more complex, however, because it operates not on a bounded set of assumptions but on the facts cognizable through a legal process.¹⁸⁶ For example, in recent litigation between Visa and its merchants

¹⁸¹ See *supra* Part IV.

¹⁸² Nat'l Soc'y of Prof'l Eng'rs v. United States, 435 U.S. 679, 688 (1978) (“Contrary to its name, the Rule does not open the field of antitrust inquiry to any argument in favor of a challenged restraint that may fall within the realm of reason. Instead, it focuses directly on the challenged restraint’s impact on competitive conditions.”).

¹⁸³ *Id.* at 695. As the Supreme Court has explained, the earliest cases “foreclose the argument that because of the special characteristics of a particular industry, monopolistic arrangements will better promote trade and commerce than competition.” *Id.* at 689. On the contrary, the Court has held that “[t]he Sherman Act reflects a legislative judgment that ultimately competition will produce not only lower prices, but also better goods and services.” *Id.* at 695.

¹⁸⁴ *Id.* (emphasis added) (quoting *Standard Oil Co. v. Fed. Trade Comm’n*, 340 U.S. 231, 248 (1951)).

¹⁸⁵ *Id.* at 696.

¹⁸⁶ *Eastman Kodak Co. v. Image Technical Servs., Inc.*, 504 U.S. 451, 467-79 (1992) (rejecting the argument that courts should adopt a legal presumption of no market power based on economic theory without examining the actual practices of participants in the market in question).

challenging debit card interchange fees, Visa's expert presented an economic model in which reducing debit card interchange fees would necessarily lead to decreases in debit card usage and increases in credit card interchange fees. The merchants were able to counter that assertion with evidence that did not fit the model.¹⁸⁷

B. *Applying Legal Doctrine*

Antitrust claims are evaluated under two principle standards of review: (1) the rule of reason, which takes account of all relevant information to evaluate the competitive effects of the challenged restraint; and (2) per se rules that invalidate particular practices without in depth inquiry. Generally, an agreement among horizontal competitors to charge a particular price is per se illegal. On its face, the interchange fee falls into this category. Yet, the courts have instead applied the rule of reason. This section reviews the applicable legal doctrine.

1. Apparent Per Se Illegality

Standard antitrust doctrine holds that agreements among horizontal competitors that affect price are per se illegal.¹⁸⁸ The banks that agree on

¹⁸⁷ *In re VisaCheck/MasterMoney Antitrust Litigation*, 280 F.3d 124, 134 (2d Cir. 2001). As the Second Circuit explained:

"Defendants' expert, Schmalensee, maintained that Carlton's model of how the debit card market would operate absent the alleged tie did not adequately take into account the following consequences that would have accompanied the cessation of the tie: (1) there would be less usage of Visa Check and MasterMoney if their interchange fees decreased because banks would issue fewer cards and defendants would spend less money advertising the cards; [and] (2) credit card interchange fees would increase as debit card interchange fees decreased if credit cards were no longer tied in a 'package' to debit cards . . .

"In response to Schmalensee's assertion that the usage of off-line debit cards would decrease absent the tie to credit cards, Carlton pointed to two real-world instances in which a reduction in interchange fees for a particular payment card led to an increase in its usage, rather than a decrease, as Schmalensee's model would predict: (1) usage of Visa's on-line POS debit card increased after Visa dramatically lowered its interchange fees in 1997; and (2) usage of Visa's off-line POS debit card significantly increased after Visa cut its interchange fees for that card in 1992. Carlton also presented the following empirical evidence contradicting Schmalensee's theory that credit and debit cards are tied in a 'package' where the interchange fees for credit cards would increase as that of off-line POS debit cards decreased: (1) credit card interchange fees are not higher in Canada, despite the fact that Canadian banks do not issue off-line POS debit cards and thus do not have a 'package' of debit and credit cards; and (2) in the United States between 1991 and 1998, interchange fees for off-line debit transactions greatly increased while credit card interchange fees generally stayed the same or increased slightly, as opposed to decreasing as Schmalensee's model would predict."

Id.

¹⁸⁸ *United States v. Socony-Vacuum Oil Co.*, 310 U.S. 150, 223 (1940) ("Under the Sherman Act a combination formed for the purpose and with the effect of raising, depressing, fixing, pegging, or stabilizing the price of a commodity in interstate or foreign commerce is illegal *per se*."). Even the agree-

the interchange fee are horizontal competitors in the market to issue payment cards, and that agreement unquestionably affects the price that merchants pay. The interchange fee would thus appear to be per se illegal horizontal price fixing.

2. Rationale for Rule of Reason Treatment

The Supreme Court has counseled against per se treatment of trade restraints, including price fixing, in situations in which some form of collaboration among competitors is necessary for the product to exist.¹⁸⁹ For example, teams in a sports league cannot effectively compete unless they first agree on rules that will govern the league.¹⁹⁰

The leading case in this area involved a challenge to the ASCAP and BMI copyright distribution systems.¹⁹¹ In these systems, individual copyright holders join together to sell a blanket license covering all of their copyrights. Such a license is, in a meaningful sense, a price fixing agreement. All copyright holders, who should compete with each other to sell their works for use on television, had agreed to charge a single price. A blanket license is also an extremely valuable product that enables businesses needing copyright-protected music to obtain the right to play a large number of musical compositions. The transaction cost savings when compared to individual licensing is likely to be significant. In addition, a blanket license dramatically reduces the copyright holders' monitoring costs, and thus enables them to license their works at a lower per song royalty.¹⁹² As Justice White explained for the Court, a blanket license combines the individual compositions with an aggregating service and thus "the whole is truly greater than the sum of its parts; it is, to some extent, a different product. . . . ASCAP, in short, made a market *in which individual composers are inherently unable to compete fully effectively.*"¹⁹³

ment to adhere to independently set announced prices or to follow a particular method of quoting prices may be illegal. *Catalano, Inc. v. Target Sales, Inc.*, 446 U.S. 643, 647-48 (1980) (citing *Sugar Inst., Inc. v. United States*, 279 U.S. 553, 601-02 (1936); *Nat'l Soc'y of Prof'l Eng'rs v. United States*, 435 U.S. 679, 692-93 (1978)).

¹⁸⁹ *NCAA v. Bd. of Regents of Univ. of Okla.*, 468 U.S. 85 (1984) (finding NCAA football could not exist without cooperation among universities); *Broad. Music Inc. v. Columbia Broad. Sys., Inc. (BMI)*, 441 U.S. 1 (1979) (finding blanket copyright license could not exist without cooperation among copyright holders).

¹⁹⁰ *NCAA*, 468 U.S. at 101 ("What is critical is that this case involves an industry in which horizontal restraints on competition are essential if the product is to be available at all.").

¹⁹¹ *BMI*, 441 U.S. at 1.

¹⁹² *Id.* at 22-23.

¹⁹³ *Id.* at 21-22 (emphasis added). The Court expanded on its conclusion that blanket licenses are a product substantially different from what an individual copyright holder could provide as follows:

The blanket license has certain unique characteristics: It allows the licensee immediate use of covered compositions, without the delay of prior individual negotiations and great flexibility

In two cases separated by more than two decades, federal courts relied on *BMI* to reject per se analysis of claims challenging collective interchange-fee setting.¹⁹⁴ In the 1984 *Nabanco* case, the court found that the agreement to set the fee was not a naked restraint because it was essential to the competing banks' ability to produce a nationally accepted payment card.¹⁹⁵ At that time, the court found that individual banks could not produce a countrywide payment system, because then-existing banking regulations hindered any particular bank's ability to compete nationally.¹⁹⁶ Further, the non-bank, nationwide systems in the market at that time—American Express and Diners Club—did not offer revolving credit options.

The issue before the court was not whether banks must cooperate in some ways to operate a national payment card system, but whether they needed to set interchange fees collectively. Even if no single bank could offer a payment card accepted nationwide, banks forming a collaborative system might nonetheless set their own interchange fees just as they set their own interest rates. The *Nabanco* court found, however, that such a system would have been impractical.¹⁹⁷ If individual issuers set their own interchange fees, merchants would have had to decide whether to accept cards on an issuer-by-issuer basis, and there were thousands of issuers.¹⁹⁸ Given the electronic processing capabilities of the day, it would have been virtually impossible to differentiate among issuers at the point of sale to determine which cards to accept.¹⁹⁹

in the choice of musical material. Many consumers clearly prefer the characteristics and cost advantages of this marketable package, and even small-performing rights societies that have occasionally arisen to compete with ASCAP and BMI have offered blanket licenses. Thus, to the extent the blanket license is a different product, ASCAP is not really a joint sales agency offering the individual goods of many sellers, but is a separate seller offering its blanket license, of which the individual compositions are raw material.

Id. at 22-23.

¹⁹⁴ *Nat'l Bancard Corp. (NaBanco) v. Visa U.S.A., Inc.*, 779 F.2d 592 (11th Cir. 1986), *aff'g*, 596 F. Supp. 1231 (S.D. Fla. 1984); *Reyn's Pasta Bella, LLC v. Visa U.S.A.*, 259 F. Supp.2d 992, 1000 (N.D. Cal. 2003). Courts addressing other collective restraints imposed by banks participating in payment card systems have reached the same conclusion. *See Worthen Bank & Trust Co. v. Nat'l Bank-Americard Inc.*, 485 F.2d 119 (8th Cir. 1973) (holding that card system by-law prohibiting members of one system from joining another could not be determined to be a per se illegal group boycott on summary judgment and remanding for a full trial at which rule of reason analysis might be appropriate).

¹⁹⁵ *NaBanco*, 596 F. Supp. at 1251-54. This Article primarily cites the district court's opinion in the *NaBanco* case. On appeal, the Eleventh Circuit followed the district court's reasoning and did not introduce new analysis. *See NaBanco*, 779 F.2d 592.

¹⁹⁶ *NaBanco*, 596 F. Supp. at 1254 (reasoning that "past and current interstate banking regulations which once flatly proscribed and continue to inhibit the growth of single bank entities which cross state lines," render cooperation essential to the existence of the system).

¹⁹⁷ *Id.*

¹⁹⁸ *Id.* at 1263-64.

¹⁹⁹ *Id.* at 1254 (describing the difficulty of checking particular cards to determine whether their issuers had entered agreements with merchant acquirers). The court also rejected per se analysis because the interchange fee was not mandatory. *Id.* at 1254-55. Visa's rules permitted individual banks to negotiate their own interchange fees. *Id.* The rules required only that issuing banks accept the collectively set

Twenty years later, in *Reyn's Pasta Bell, LLC v. Visa U.S.A.*, a Northern District of California court reached the same conclusion. Citing both *BMI* and *Nabanco*, the court recognized that credit card systems provide substantial benefits and concluded that the Visa and MasterCard credit card systems are “different from anything an individual competitor could sell.”²⁰⁰

Given the development of the payment card industry from the early 1980s through the present, the *Nabanco* decision to apply the rule of reason may have been correct, and the *Reyn's Pasta Bell* decision wrong. By 2003, the regulatory and technological limitations that prevented individual banks from operating their own national card systems were no longer applicable. Several issuers of Visa and MasterCard credit cards—including Bank of America, Citibank, Chase, and Capital One—competed nationally. In addition, American Express and Discover now also issue credit cards nationally through banks, and even Diners Club offers the option to pay over time. It simply is no longer true that an individual bank could not operate a national credit card system. Technology has also evolved to a point where merchants could feasibly differentiate issuers with different interchange fees at the point of sale. The same electronic card reading terminal can distinguish among multiple card networks, including Visa, MasterCard, American Express, Discover, Diners Club, JCB, and a variety of ATM networks.²⁰¹ These readers are capable of recognizing certain Visa and MasterCard rewards cards on which a higher interchange fee is charged.²⁰² If a card reader can discern which Visa and MasterCard cards are reward cards and which are not, then these readers could be programmed to distinguish among Visa and MasterCard issuers on other bases as well.

Where the *Nabanco* court could reasonably conclude that Visa and MasterCard had made a market in which individual banks, in Justice White's words “are inherently unable to compete fully effectively,”²⁰³ the *Reyn's Pasta Bell* court could not, at least not without considerably more analysis than it provided. The most persuasive argument for ongoing rule of reason assessment of the interchange fee turns on the importance of small financial institutions participating in the system. Although the largest Visa and MasterCard issuers could operate their own card systems, the thousands of smaller members of these systems could not. Although the retail banking market has consolidated substantially over the last decade, many small

fee in the absence of a bilateral agreement. *Id.* The *BMI* court, in contrast, did not stress non-exclusivity in its analysis, although it recognized that a prior consent decree had required non-exclusivity. *Broad. Music, Inc. v. Columbia Broad. Sys. (BMI)*, 441 U.S. 1, 11 (1979).

²⁰⁰ *Reyn's Pasta Bella, LLC v. Visa U.S.A.*, 259 F. Supp. 2d 992, 1000 (N.D. Cal. 2003) (quoting *BMI*, 441 U.S. at 23).

²⁰¹ EVANS & SCHMALENSSEE, *supra* note 2, at 259.

²⁰² Lyon, *supra* note 2 (explaining that Visa and MasterCard charge higher interchange fees for reward cards than for other cards).

²⁰³ *BMI*, 441 U.S. at 23.

banks, credit unions and thrifts remain in the market. These small financial institutions issue cards to their customers and sign up their merchant clients to accept payment cards. Some collaboration among banks remains necessary for these institutions to remain part of the system. If one assumes pro-competitive value to a payment system in which all banks can participate, it likely remains true that the collectively set interchange fee should not be per se illegal.²⁰⁴

3. Applying the Rule of Reason to Payment Card Interchange Fees

Rejecting per se analysis, of course, does not establish that a restraint is lawful. The agreement must still be “subjected to a more discriminating examination under the rule of reason.”²⁰⁵ To assess the competitive impact of a restraint, a court must first determine (1) the relevant market in which the defendants’ compete, and (2) whether they have sufficient power in that market to harm consumers.²⁰⁶ In a competitive market, potentially anticompetitive behavior by small players without market power should be self-correcting. Consumers will move away from the anticompetitive actors and purchase from competitors employing more consumer friendly behavior. This loss of customers will force the anticompetitive actors to better toe the competitive line. Outside of the per se rules, only when agreeing market participants have market power—the ability to raise price or reduce service or quality without losing sufficient customers to stop the practice—will antitrust law intervene.²⁰⁷

In *Nabanco*, the plaintiff argued that credit cards formed a relevant product market.²⁰⁸ The court disagreed, finding that all payment systems, including cash, checks, debit cards, ATM cards, store cards, gasoline cards, and travelers checks, competed in the same market.²⁰⁹ When the market is

²⁰⁴ Small issuers might provide substantial value to the system through their ability to reach customer segments that do not respond to the marketing methods used by larger issuers.

²⁰⁵ *Broad. Music Inc. v. Columbia Broad. Sys.*, 441 U.S. 1, 24 (1979).

²⁰⁶ *See, e.g., Nat’l Bancard Corp. (NaBanco) v. Visa U.S.A., Inc.*, 596 F. Supp. 1231, 1250, 1264-65 (S.D. Fla. 1984), *aff’d*, 779 F.2d 592 (11th Cir. 1986). Formal proof of a relevant market and market share is not essential to a rule of reason case if the plaintiff can prove harmful effects on consumers that flow from the challenged restraint. *Fed. Trade Com’n v. Ind. Fed’n of Dentists*, 476 U.S. 447, 460-61 (1986).

²⁰⁷ *See, e.g., NaBanco*, 596 F. Supp. at 1264-65.

²⁰⁸ *Id.* at 1250.

²⁰⁹ *Id.* at 1257. The court found that:

There is no market for the ‘sale’ of cardholder transactions . . . from merchant banks to issuing banks, and it would be meaningless to use such a market for purposes of analysis in this case. Only the member which issued a card has any interest in acquiring from merchant banks transactions effected by that card.

seen in this way, Visa held too small a percentage to raise anticompetitive concerns.²¹⁰

Although the court could have stopped its analysis at this point, it also found that procompetitive benefits flow from a collectively set interchange fee. This business practice, the court believed, made possible ubiquitous card acceptance by establishing in advance the price an acquirer must pay to an issuer.²¹¹ Bilateral negotiations would require large transaction costs and could result in issuers demanding fees that were too high, leading acquirers to exit the system and merchant acceptance to drop.²¹²

Further, the court found that the interchange fee distributed the costs of the industry in a way that would provide proper incentives for banks to both issue cards and acquire merchants.²¹³ Because of the fraud and credit risk is borne by issuers, the court believed, card issuing had higher costs than merchant acquiring.²¹⁴ “[B]y bringing the costs of the system in line with the revenue for each participating Visa member bank regardless of the role it plays,” the court concluded that the interchange fee helps to expand industry output.²¹⁵

4. Critiquing the *Nabanco* Rule of Reason Analysis

In recent cases, the *Nabanco* court’s market definition analysis has been explicitly rejected by courts finding that credit cards form a separate relevant product market. In addition, significant doubt has been cast on *Nabanco*’s analyses of the anticompetitive effects of the collectively set interchange fee.

a. *Relevant Market and Market Power*

In *United States v. Visa U.S.A.*, a government prosecution attacking another collectively set provision of the Visa and MasterCard systems, the

Id. at 1259. The court also recognized that different payment methods were favored for different types of purchases, but concluded that some method other than credit cards always provided sufficient competition to deny credit card companies the ability to raise price profitably:

While each [method of payment] was not considered to be a close substitute for a VISA card for purchases of every possible product at every possible price, all payment services taken together were sufficient to provide, at the least, several close substitutes for a VISA card in any possible context.

Id. at 1257.

²¹⁰ *Id.* at 1258.

²¹¹ *Id.* at 1260.

²¹² *Id.* at 1261.

²¹³ *NaBanco*, 596 F. Supp. at 1260-61.

²¹⁴ *Id.* at 1260

²¹⁵ *Id.* at 1261.

Second Circuit ruled that credit cards are a relevant market.²¹⁶ The trial court explained its reasoning through an analogy: Even though cars, trains, and buses provide substitute transportation for many destinations also served by airplanes, those alternatives would not be sufficiently close substitutes to stop commercial airlines from profitably raising prices if they were able to collude on airfares.²¹⁷ The court found that the same reasoning is true with respect to credit cards.²¹⁸ In addition, the court found that both Visa and MasterCard, jointly and collectively, possessed market power based on both evidence of their market shares and their ability to raise price profitably.²¹⁹

With respect to interchange fees, the district court carefully described evidence showing “specific conduct indicating the defendant’s power to control prices or exclude competition.”²²⁰ The court pointed to “the testimony of merchants that they cannot refuse to accept Visa and MasterCard even in the face of significant price increases because the cards are such preferred payment methods that customers would choose not to shop at merchants who do not accept them.”²²¹ The court also found that “both Visa and MasterCard have recently raised interchange rates charged to merchants a number of times, without losing a single merchant customer as a result,” and they discriminate among merchants as a monopolist would, charging higher interchange fees to those most dependent on credit cards.²²²

²¹⁶ United States v. Visa U.S.A. Inc., 163 F. Supp.2d 322, 334-37 (S.D.N.Y. 2001), *aff’d*, 344 F.3d 229, 238-40 (2d Cir. 2003) It is highly unlikely that there would be enough cardholder switching away from credit and charge cards to make any such price increase unprofitable for a hypothetical monopolist of general purpose card products. This conclusion is buttressed by the fact that (1) few, if any, cardholders actually can or do observe price increases, including interchange rate increases and increases in service fees charged by issuing banks; and (2) the burden of such increases is at least partly passed on by merchants and so is shared by consumers who use other means of payment. *Id.* at 336. The appeals court attacked Visa and MasterCard rules that permitted banks to issue both of those card brands, but no other. *See* United States v. Visa U.S.A., Inc., 344 F.3d 229 (2d Cir. 2003).

²¹⁷ United States v. Visa U.S.A., Inc., 163 F. Supp. 2d 332, 338 (S.D.N.Y. 2001).

²¹⁸ *Id.*

²¹⁹ *Id.* at 340-41 (explaining that “even a cursory examination of the relevant characteristics of the network market reveals that whether considered jointly or separately, the defendants have market power”), *accord* United States v. Visa U.S.A., 344 F.3d 229, 238-40 (2d Cir 2003).

²²⁰ United States v. Visa U.S.A. Inc., 163 F. Supp. 2d 332, 340 (citing K.M.B. Warehouse Distribs. v. Walker Mfg. Co., 61 F.3d 123, 129 (2d Cir. 1995)).

²²¹ *Id.*

²²² *Id.* at 341 (“Visa and MasterCard are able to charge substantially different prices for those hundreds of thousands of merchants who must take credit cards at any price because their customers insist on using those cards.”). The European Commission found similar evidence of discrimination:

It would appear that merchants paying the highest average rates for MasterCard and Visa card acceptance (florists, restaurants, professional services, car rental, hotels) are typically those active in the T&E sector, where travelers expect to pay with cards, while merchants paying lower fees are typically to be found in segments with low profit margins (charitable organizations, contracted services, government services, wholesale trade, etc.). An outlier is the fuel sector, which yields high margins but nevertheless pays comparatively low fees for card acceptance.

b. *Anticompetitive Effects Flowing From Interchange Fees*

Courts have yet to thoroughly analyze the competitive effects of collectively set interchange fees under current market conditions. But early indications show that courts are unlikely to accept *Nabanco's* conclusions without careful scrutiny. Although the government prosecution of Visa and MasterCard did not directly challenge the interchange fee, Judge Jones opined that “[w]hile . . . it is very difficult to analyze the effects on consumer welfare of increases or decreases in interchange rates, merchants—and ultimately consumers—have an interest in the vigor of competition to ensure that interchange pricing points are established competitively.”²²³ In addition, in two recent cases directly attacking the collectively set interchange fee, Northern District of California courts allowed the claim to survive dispositive motions.²²⁴

EC Report, *supra* note 2, at 51; *see supra* note 75.

²²³ United States v. Visa U.S.A. Inc., 163 F. Supp. 2d 332, 396 (S.D.N.Y. 2001).

²²⁴ Visa U.S.A. Inc. v. First Data Corp., No. C 02-01786 JSW, 2006 WL 1310448 (N.D. Cal. May 12, 2006) (permitting challenge to collectively set interchange fee to survive summary judgment where a processor sought to offer a competing settlement system with potentially lower interchange fees); Reyn's Pasta Bella, LLC v. Visa U.S.A., 259 F. Supp.2d 992, 998-99 (N.D. Cal 2003) (permitting claim to survive a motion to dismiss, reasoning that the ability of banks to bypass the Visa system was an essential part of the *NaBanco* holding, and whereas in this case the plaintiff alleged that banks had agreed not to bypass the system), *aff'd*, 259 F. Supp. 2d 992 (9th Cir. 2006).

In a recent case, a district court dismissed a merchant attack on the interchange fee on the ground that merchants are *indirect purchasers*. *Kendall v. Visa U.S.A., Inc.*, No. C 04-04276 JSW, 2005 U.S. Dist. LEXIS 21450, at *7-*9 (N.D. Cal. July 25, 2005). Under the federal antitrust laws, the *direct* purchaser from an antitrust violator may sue to recover the entire anticompetitive overcharge even if it passed on some of the overcharge to an indirect purchaser. *Hanover Shoe Inc. v. United Shoe Mach. Corp.*, 392 U.S. 481 (1968). But an indirect purchaser is generally prohibited from recovering damages. *Ill. Brick v. Illinois*, 431 U.S. 720, 737 (1977). In *Kendall*, the court reasoned that the interchange fee is imposed on acquirers, the direct purchasers, who then pass the fee on to merchants. *Kendall*, 2005 U.S. Dist. LEXIS 21450, at *9-*10. Nevertheless, for four reasons, the indirect purchaser rule is unlikely to defeat all merchant challenges to the collectively set interchange fee.

First, the rule does not apply to claims for injunctive relief, which is a primary concern for merchants attacking interchange fees. *Lucas Auto. Eng'g, Inc. v. Bridgestone/Firestone, Inc.*, 140 F.3d 1228, 1235 (9th Cir. 1998) (holding “indirect purchasers are not barred from bringing an antitrust claim for injunctive relief against manufacturers”); *McCarthy v. Recordex Serv., Inc.*, 80 F.3d 842, 856 (3d Cir. 1996); *In re Beef Indus. Antitrust Litig.*, 600 F.2d 1148, 1167 (5th Cir. 1979), which is a primary object of merchants attacking interchange fees.

Second, acquiring services are sometimes sold on a strict interchange-fee-plus basis, *see* EVANS & SCHMALENSEE, *supra* note 2, at 155 (“[C]hanges in the interchange fee lend [sic] to changes in the merchant discount Large merchants typically pay an acquirer fee plus the interchange fee; the effect on smaller merchants may not be as direct or immediate.”), an arrangement which the Supreme Court has recognized as a potential exception to the indirect purchaser rule. *See Illinois Brick*, 431 U.S. at 724 n.2, 736 (1977) (recognizing a potential exception for pre-existing cost plus contracts). Even in those cases in which acquiring contracts are not written in this way, there is little dispute that the entire interchange fee is passed on. *See supra* note 2. The Court has held, however, that the indirect purchaser

VI. APPLYING ECONOMIC AND LEGAL ANALYSIS AND PROPOSING A COMPETITIVE REMEDY

A conscientious judge seeking to decide a complex antitrust case must weave modern economic learning into existing antitrust legal doctrine. One cannot trump the other. The Supreme Court long ago abandoned the notion that economic arguments were irrelevant to the judicial function in antitrust cases.²²⁵ Economics can only inform, however; it should not decide.²²⁶

In the past, some antitrust legal doctrine was so irrational that economics could definitively show that the legal rules should change.²²⁷ But that low hanging fruit was picked long ago. In any case brought under modern antitrust doctrine that survives a motion to dismiss, a court must carefully consider current economic learning in applying the fundamental principal of antitrust, that “ultimately competition will produce not only lower prices, but also better goods and services.”²²⁸

Incorporating economic learning into legal analysis is no easy task. Most judges and litigating lawyers are not trained to use complex economic

rule does apply to public utilities required by regulation to pass on the costs of power, because the delays and uncertainties inherent in the regulatory pricing process would raise the same complications as those recognized in *Illinois Brick*. *Kansas v. Utilicorp United Inc.*, 497 U.S. 199, 216 (1990).

Third, many states have refused to apply the indirect purchaser rule to their state law counterparts to the Sherman Act, thus permitting merchant attacks on the interchange fee in many states’ courts. Jonathan R. Tomlin & Dale J. Giali, *Federalism and the Indirect Purchaser Mess*, 11 *GEO. MASON L. REV.* 157, 161-62 (2002) (explaining that 36 states and the District of Columbia recognize antitrust claims by indirect purchasers).

And fourth, the distinction between direct and indirect purchasers may not be applicable to the context of the collectively set interchange fee. Acquiring banks are not “purchasing” a good or service from issuing banks that they then pass on to merchants. Instead, acquiring banks are participants in a joint venture with issuing banks to provide a payment card system, the benefits of which are purchased directly by cardholders and merchants. *EVANS & SCHMALENSEE*, *supra* note 2, at 151; *cf. In re Visa-Check/MasterMoney Antitrust Litig.*, No. 96-CV-5238, 2003 WL 1712568, at *6 (E.D.N.Y. Apr. 1, 2003) (holding that merchants have standing to prosecute a claim alleging monopolization of the debit card market because they “are direct consumers of the defendants’ debit cards services and are directly injured by their allegedly anticompetitive conduct”).

²²⁵ Certainly by 1977, when the Court overruled its earlier decision holding vertical territorial division agreements per se illegal in *Continental T.V., Inc. v. GTE Sylvania Inc.*, 433 U.S. 36 (1977), the Court had clearly signaled its intent to take economic arguments seriously. The majority opinion in *Sylvania* relied extensively on legal and economic scholarship in rejecting a per se rule for non-price vertical restraints, *id.* at 48 n.13, 51 n.18, 55-57 & n.26, and the Court continued to do so in subsequent cases. *See, e.g., Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 589-95 (1986) (assessing predatory pricing claims).

²²⁶ The extensive literature applying economic analysis to the issue of interchange fees has been described as “not very useful for either rationalizing or designing a system of interchange fee regulation.” *Evans & Schmalensee*, *supra* note 10, at 28.

²²⁷ *See generally*, ROBERT H. BORK, *THE ANTITRUST PARADOX: A POLICY AT WAR WITH ITSELF* (1978).

²²⁸ *Nat’l Soc’y of Prof’l Eng’rs v. United States*, 435 U.S. 679, 695 (1978).

analysis. The legal academy may be best positioned to facilitate the economics/antitrust dialog through scholarly commentary that integrates modern economics into antitrust legal analysis. This academic-judicial tag-team played a critical role in the transformation of antitrust law a quarter century ago,²²⁹ and it holds similar promise with respect to antitrust's current challenges.

A. *Integrating Economic and Legal Analysis*

Economic models can inform legal analysis by revealing market forces that might not otherwise be apparent. A classic example involves cases in which a seller ties the sale of one product to another. Antitrust legal analysis once saw no legitimate justification for tie-in sales.²³⁰ Economic analysis revealed, however, that if certain assumptions applied, ties could be pro-competitive.²³¹

Importantly, the economists' ability to demonstrate that not all ties were harmful did not establish that all ties were beneficial.²³² A properly informed legal analysis remained necessary to determine if a particular market had the characteristics that might render ties beneficial before condemning them. The role of courts and regulators in separating the wheat from the chaff remained; economics positioned them to do so more effectively.

1. The Economics of Two-Sided Markets

Just as economists drove the evolution in the law of tying, economists have made important contributions to our understanding of credit card markets. They have shown that these markets are two-sided, that is, they involve two separate customer sources whose use of the service directly affects each other. As a result, efficient pricing may require charging significantly above marginal cost to customers on one side of the market, and sig-

²²⁹ Perhaps the clearest example of the Supreme Court's willingness to rely on the academy to help shape legal doctrine are its predatory pricing cases. *E.g.*, *Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.*, 509 U.S. 209, 219-42 (1993) (citing to legal and economic academic analysis in rejecting a predatory pricing claim); *Matsushita*, 475 U.S. at 588-95 (same).

²³⁰ See BORK, *supra* note 227, at 365-81.

²³¹ RICHARD POSNER, *ANTITRUST LAW: AN ECONOMIC PERSPECTIVE* 173-84 (1976) (explaining that a monopolist cannot expand its market power by spreading it to a second product through a tying arrangement); Ward S. Bowman, *Tying Arrangements and the Leverage Problem*, 67 *YALE L.J.* 19, 21 (1957) (same).

²³² See generally, Louis Kaplow, *Extension of Monopoly Power Through Leverage*, 85 *COLUM. L. REV.* 515 (1985) (demonstrating that tying agreements can produce competitive harm and can lead to an extension of monopoly power in particular circumstances).

nificantly below marginal cost on the other, in order to achieve efficient output levels.²³³

Just as newspapers efficiently charge readers much less than the marginal cost of producing and delivering the paper, a credit card system may efficiently provide cards to cardholders below marginal cost.²³⁴ If this is true, interchange fees may enable a payment system to attract sufficient cardholders to optimize output in the same way that advertising revenue enables newspapers to attract sufficient readership.²³⁵ Decreasing interchange fees and cardholder benefits to the point that consumers reduced card usage would not only reduce revenue from the transactional interchange fees that those merchants would have paid, but the loss of that volume may make cards less valuable to merchants, causing them to leave the system and thereby further reduce card system revenue. Conversely, any supra-competitive profits exacted from merchants might be expected to be competed away in an effort to attract cardholders.

Just as the economics of tie-in sales could demonstrate only that some ties were efficient, the economics of two-sided markets can show only that revenue shifting enabled by collectively set interchange fees *may* be efficient.²³⁶ The possibility that card systems may use cost-shifting to exploit market power remains. For example, if merchant demand elasticity is very low relative to cardholder demand elasticity, issuing banks with market power might profitably retain interchange fee income without significantly affecting merchant acceptance. In the end, the economics does not answer the antitrust question, it merely channels the ways in which the law should seek to identify anticompetitive abuses.

2. Incorporating Two-Sided Market Economics into Antitrust Legal Analysis of Interchange Fees

The economics of two-sided markets can aid in the legal analysis of interchange fees by helping frame the questions that a court must answer to determine whether collectively set interchange fees are being used anti-competitively.

²³³ See *supra* Part IV.A.

²³⁴ Muris, *supra* note 10, at 517-19.

²³⁵ In the extreme, as leading interchange fee economists Evans and Schmalensee point out, “the product [in a two-sided market] may not exist at all if the business does not get the price structure right.” EVANS & SCHMALENSEE, *supra* note 2, at 4. One commentator accuses regulators of engaging in “naive analysis” by expecting each side of a two-sided market to cover marginal costs. Muris, *supra* note 10, at 515, 517-20.

²³⁶ See Carlton & Frankel, *supra* note 37, at 630 (explaining that economic theory identifies externalities and interdependencies within two-sided markets that may affect the efficiency of the markets, but does not show whether they “are empirically significant, or whether they should alter how a particular industry is typically analyzed”).

a. *Existence and Direction of the Interchange Fee*

As an initial matter, the economics tells us that we should *not* expect to see each side of a two-sided market covering its own costs under competitive conditions. Nor should we expect to see an interchange fee that is designed precisely to balance the costs and revenue of the two sides. An efficient pricing structure will also take account of the elasticities of demand in both markets. Only by pure chance therefore would those elasticities lead to a zero or strictly cost-based interchange fee under competitive conditions.

A court observing interchange flowing from acquirers to issuers should therefore ask whether cardholder elasticity of demand is higher than merchant elasticity of demand, that is, would cardholder usage vary more with changes in the price of payment cards than merchant acceptance would vary with changes in the merchant discount.

Demand elasticities can be difficult to measure. One can easily observe, however, that all existing payment card systems with a credit component, regardless of market share, charge a merchant discount higher than that necessary to support the acquiring side of the business. One can identify the revenue necessary to support the acquiring side of the business by looking to the non-interchange fee portion of the Visa and MasterCard merchant discounts. This amount is probably no more than 0.5 percent of the transaction amount.²³⁷ Given the generally accepted view that acquiring services are competitively priced, that American Express, Diners Club, and Discover all charge merchant discounts significantly above the 0.5 percent level indicates that they too shift revenue from the merchant to the issuing side. Moreover, increases in interchange fees have apparently had little effect on merchant acceptance,²³⁸ while card pricing decisions appear to affect cardholder usage dramatically.²³⁹ The direction of interchange fee payments therefore appears to be consistent with an efficient and competitive market.

²³⁷ See EVANS & SCHMALENSEE *supra* note 2, at 11.

²³⁸ United States v. *Visa U.S.A. Inc.*, 163 F. Supp. 2d 332, 340 (S.D.N.Y. 2001) (citing evidence that Visa officials could not identify a single merchant that stopped accepting Visa cards as a result of interchange fee increases).

²³⁹ At least in the early years, the banks believed that increasing interest rates and membership fees “present[ed] a particularly serious risk of loss of a substantial number of cardholders.” *NBE Bus. Rev. App.*, *supra* note 114 at 33. In the 1980s, the *NaBanco* court cited evidence that cardholder demand would drop dramatically if more direct costs were placed upon cardholders. *Nat’l Bancard Corp. (NaBanco) v. Visa U.S.A., Inc.*, 596 F. Supp. 1231, 1261 (S.D. Fla. 1984). Given the ease with which cardholders can switch cards today, that concern likely remains applicable. *Cf. Muris*, *supra* note 10, at 543 (“Given the presence of alternative payment methods, many consumers would avoid cards rather than pay more.”).

b. *Interchange Fee Level*

The need for some interchange fee that shifts revenue from merchants to cardholders does not exclude the possibility that current interchange fees are set at inefficiently high levels.²⁴⁰ Although merchants bemoan fee increases in the face of decreasing costs, economic analysis reveals that costs are not determinative in assessing whether the interchange fee is set at an efficient level. A court must focus instead on whether issuers are using the interchange fee to shift more revenue than necessary.

c. *Analysis Supporting Supra-Competitive Interchange Fee Levels*

Interchange fees have increased significantly since the mid-1990s. At the same time, fraud costs have declined and interest rates have been at historically low levels, limiting credit losses. All the while, issuer revenue has grown through increased transaction volume and receivables. All things being equal, lower costs and higher revenue on the issuer side should lead to lower interchange fees.²⁴¹

Economic analysis does indicate that the need to stimulate card use through more risky extensions of credit and rewards programs could theoretically be efficient even in the face of declining issuer costs. To explain the increase in interchange fees beginning in the 1990s, however, one would need to identify some change in market conditions that created the need to shift an even higher percentage of revenue from merchants to issuers than had been shifted before.

All of the apparent changes, however, seem to point in the opposite direction. Assuming that the interchange fee was set at an efficient level at the beginning of the 1990s, there appears to be no efficiency enhancing change in the market that would justify the fee increases that have occurred over the past 12 years.

By contrast, there are reasons to believe that the increases in interchange fees arose as a result of the increasing level of market power that the largest card issuers obtained over merchants. Although Visa and Master-

²⁴⁰ Some commentators jump from the basis that market power must be analyzed differently given the two-sided nature of the market to the conclusion that market power is irrelevant in a two-sided market. For example, Schmalensee asserts that “[t]he main economic role of the interchange fee is not to exploit the system’s market power; it is rather to shift costs between issuers and acquirers and thus to shift charges between merchants and consumers to enhance the value of the payment system as a whole to its owners.” Schmalensee, *supra* note 10, at 105.

²⁴¹ EVANS & SCHMALENSSEE, *supra* note 2, at 154-55 (explaining that when issuer revenue increased with the addition of new cardholder fees in the 1980s, economic theory predicted and the systems in fact experienced a reduction in interchange fees).

Card have dominated payment card volume since the 1970s, prior to the 1990s, the ability of the banks that control the systems to collectively harm consumer welfare was quite limited. Within the payment card systems, individual banks set virtually all of their own fees and competed with each other. Although the interchange fee was set collectively, the associations were open to any bank or other federally insured financial institution.²⁴² Any potential for issuer market power would have been expected to spur entry or expansion by existing members, eroding supra-competitive profits and thus lessening any incentive for the banks to use their collective power over the interchange fee for anticompetitive purposes. In fact, in the late 1980s, large non-banking corporations entered the payment card market on a large scale, most notably AT&T, General Motors, and General Electric.²⁴³

Over the last decade, however, the largest card issuers have consolidated, increasing their dominance of the systems.²⁴⁴ Executives from these large issuers, through the boards of directors of Visa and MasterCard, have effectively dictated the interchange fee.²⁴⁵ These issuers operate at a scale much larger, and have lower system costs, than the thousands of other issuers in the system. As a result, they likely have significantly more favorable cost structures that enable them to exploit excess interchange fee revenue in ways that smaller issuers cannot.²⁴⁶

²⁴² MasterCard has converted from an association to a publicly held company, but the merchants challenging the interchange fee have alleged that the banks will retain the same level of control. *See* First Consolidated Amended Class Action Complaint at ¶¶ 127-132, *In re* Payment Card Interchange Fee & Merchant Disc. Antitrust Litig., No. MD 05-1720(JG)(JO) 2006 WL 1488491 (E.D.N.Y. Apr. 24, 2006).

²⁴³ EVANS & SCHMALENSEE, *supra* note 2, at 78-79.

²⁴⁴ The top five card issuers now control over 80% of card transaction volume. Lyon, *supra* note 2. As recently as 1990, the ten largest Visa and MasterCard issuers accounted for only 42% of cards issued. EVANS & SCHMALENSEE, *supra* note 2, at 203.

²⁴⁵ The associations are currently in the process of restructuring their boards to provide for a majority of independent directors. Lyon, *supra* note 2. So long as the associations are operated to serve the interests of their member banks, however, the incentives that govern interchange-fee setting are unlikely to change.

Although by-lateral agreements setting different interchange fees are not explicitly prohibited, they are discouraged by the card systems' fee structures. Moreover, if interchange fees were set at supra-competitive levels, few banks would have an incentive to agree to exchange paper at a lower level. As a result, all issuing banks within a system tend to receive the same interchange fee. *Visa U.S.A., Inc. v. First Data Corp.*, C 02-01786 JSW, 2006 WL 1310448, at *3 (N.D. Cal. May 12, 2006). Interchange fees do differ based on the industry and other factors. But these differences apply to all issuers equally. *See supra* Part V.A.

²⁴⁶ Of course, there remain enough large issuers that one might expect competition among them to be sufficient. Regulators in other countries, however, have investigated whether or not all excess revenue is competed away and consumer harm is occurring despite apparent competition. Press Release, European Comm'n, Commission Sends Statement of Objections to MasterCard (Apr. 30, 2006), <http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/06/260&format=HTML&aged=1&language=EN&guiLanguage=en>.

Another change has arisen on the card acceptance side of the market. Today, virtually all retail establishments accept credit cards, including those issued by brands with relatively few cardholders.²⁴⁷ Most cardholders carry multiple cards from different systems and use their cards for growing percentages of their purchases.²⁴⁸ As a result, banks have acquired a significant degree of market power vis-à-vis merchants. The point is not just that card transaction volume has increased as a percentage of all means of payment, but also that consumers have come to expect ubiquity in card acceptance. Any merchant that decided to stop accepting Visa and/or MasterCard payment cards would likely face consumer backlash.²⁴⁹

Without the interchange fee, banks would have no way to exploit this power over merchants. Acquirers compete quite vigorously and their recent willingness to narrow their own margins in pursuit of volume suggests that they would quickly reduce merchant fees dramatically if interchange fees were abandoned. Moreover, the largest card issuing banks no longer see the acquiring business as a profit center.²⁵⁰ They maintain a presence in order to preserve their relationships with business customers, but the acquiring burden today falls primarily to low margin, high volume processors.²⁵¹

The largest card issuing banks may have more control over the means of competition with respect to cardholders because there are only a few large issuers. A critical empirical question for a court would be whether these large issuers have the ability to differentiate their products sufficiently to allow them to retain supra-competitive profits. The available information appears mixed. On the one hand, the issuers' ability to raise price is limited because consumers have grown accustomed to cards without annual or transaction-based fees and would likely respond to an increase in these fees by switching issuers. On the other hand, issuers have successfully increased other less apparent fees, including late payment and over-the-credit-limit fees, perhaps allowing them to retain supra-competitive profits.

If merchants prove that interchange fees have been increased to benefit the issuing banks, they can likely demonstrate consumer harm. Economic analysis predicts that interchange fees will be set too high if banks pass on less interchange revenue to cardholders than they receive.²⁵² The available evidence suggests that this is the case.²⁵³

²⁴⁷ EVANS & SCHMALENSEE, *supra* note 2, at 148.

²⁴⁸ *Id.*

²⁴⁹ United States v. Visa U.S.A. Inc., 163 F. Supp. 2d 322, 340-41 (S.D.N.Y. 2001); Muris, *supra* note 10, at 522.

²⁵⁰ See EVANS & SCHMALENSEE, *supra* note 2, at 254.

²⁵¹ *Id.*

²⁵² See *supra* Part V.B.4.

²⁵³ See *infra* Part VI.B.

d. *Rejecting Arguments that Interchange Fee Levels are Not Supra-Competitive*

In defending against claims that interchange fees are too high, commentators and the Visa and MasterCard networks cite two factors that they say indicate that current fees are competitive. First, they argue that fees are in line with issuer costs. Although one should not expect interchange fees to strictly mirror costs, this argument runs, if interchange fees are in line with costs, then they are less likely to cause serious competitive harm. Second, commentators and the payment systems emphasize that total merchant discount levels for systems setting interchange collectively are lower than American Express's unilaterally set merchant discount. If a single issuer with less than 20 percent of the market unilaterally shifts a higher percentage of revenue from the merchant to the issuing side than the larger Visa and MasterCard systems, then the lower collectively set fees should not raise competitive concerns. Neither argument is convincing.

e. *Issuer Costs Do Not Exceed Revenue*

The Visa and MasterCard position that interchange fees merely cover costs is based on a calculation that excludes all interest revenue and a large portion of cardholder fee revenue.²⁵⁴ They justify this calculation by arguing that the costs and revenues attributable to their consumer-lending business should not be relevant to interchange fee levels. Without a credit card system, however, the issuers' consumer lending business would be impacted in a significant and negative way. Issuers would thus surely use cardholder fee and interest revenue as needed to ensure an efficient payment system so long as they still earned sufficient profits overall to support their investment in the card business.²⁵⁵

²⁵⁴ EVANS & SCHMALENSEE, *supra* note 2, at 150, 154. The cost basis of the interchange fees have long been questioned. In *NaBanco*, for example, the plaintiff argued that the fee might have been set with the purpose of hindering non-bank acquirers' ability to compete. Nat'l Bancard Corp. (NaBanco) v. Visa U.S.A., Inc., 596 F. Supp. 1231, 1241 (S.D. Fla. 1984).

²⁵⁵ Alan Frankel has suggested another problem with the payment card systems' argument that interchange fees are cost based:

These studies invariably find that members incur more costs on the consumer side of the business than they do on the merchant side. Therefore, they reason, a payment must be made from the bank on the merchant side of each transaction to the bank on the issuing side to keep the costs in balance and permit the system to operate. This reasoning is flawed, however, because it ignores the problem of identifying cause and effect. These accounting studies cannot distinguish a pro-competitive interchange fee that compensates issuers for costs they incur in the ordinary course of issuing cards to consumers from costs incurred by issuers seeking the additional profits generated by anticompetitive interchange fees.

Frankel, *supra* note 18, at 342.

In the U.S., card issuing banks earn approximately 85 percent of their card-related revenue from interest payments (70 percent) and cardholder fees (15 percent).²⁵⁶ The Visa and MasterCard so-called “cost-based” calculations are thus artificial constructs that try to mimic a payment card system that did not include a credit component. They convey virtually nothing about the true relationship of interchange fees and overall issuer costs and revenue. Although more accounting information is needed to draw a firm conclusion, issuers do not appear to need interchange fees to cover their costs.

Once again, the economic analysis cautions us not to draw firm conclusions of anticompetitive activity in a two-sided market based on activities that might support such a conclusion in a typical market. Even if card issuing generates sufficient revenue to cover costs and earn reasonable profits without an interchange fee, the existence of an interchange fee may still serve procompetitive purposes. The additional funds may enable issuers to reduce fees and interest rates and provide rewards that stimulate beneficial card usage that might not otherwise occur. The 15 percent of issuer revenue attributable to interchange fees may be critical to ensuring an efficient level of credit card use, but the argument that anticompetitive effects are extremely unlikely to arise from collectively set interchange fees because those fees merely cover cost should be rejected.

f. *Comparisons to Unitary Systems Do Not Justify Interchange Fees at Current Levels*

Commentators often compare the Visa and MasterCard systems with unitary systems in attempting to show that collectively set interchange fees should not raise competitive concerns.²⁵⁷ Although American Express is used most often, the more appropriate comparison is the Discover Card system, and that comparison suggests that collectively set interchange fees are too high.

For American Express, commentators act as if payment cards were undifferentiated commodities. Timothy Muris, for example, argues that “[t]he only difference between integrated systems and cooperative joint ventures is . . . the form of the corporate structure If the problem is that payment card use is improperly subsidized through these [interchange] fees, then that concern applies with equal force to American Express.”²⁵⁸ Muris concludes that because American Express has a higher merchant discount, “the market distortion created by excessive merchant discounts should not

²⁵⁶ EVANS & SCHMALENSSEE, *supra* note 2, at 223.

²⁵⁷ See, e.g., Muris, *supra* note 10, at 542; Stephen V. Bomse & Scott A. Westrich, 2005 COLUM. BUS. L. REV. 643, 653; Klein et al., *supra* note 38, at 594, 599-600, 617-18.

²⁵⁸ Muris, *supra* note 10, at 542.

be less for American Express. Thus, [a] decision . . . to regulate interchange fees for Visa and MasterCard, but not American Express, appears inexplicable.”²⁵⁹

This logic would be sound if payment cards were interchangeable. In a commodified market in which no competitor has substantial market power, a higher merchant fee in equilibrium, as American Express’s seems to be, could only be explained by its efficiency enhancing qualities. Otherwise, merchants would simply drop American Express in favor of other payment card systems that charge lower fees. Payment systems, however, are not interchangeable, particularly from the merchant’s perspective. American Express has a large percentage of cardholders using charge cards that do not permit payment over time with interest.²⁶⁰ One would expect a card system without interest revenue to have a higher interchange fee. Virtually all Visa and MasterCard cards include the option to pay interest over time and, as a result, American Express’s charge card interchange fees serve as a poor point of comparison.

Second, as a single entity setting its price to merchants unilaterally, American Express is free to exploit through supra-competitive pricing any market power that its brand provides. Its higher merchant discount may simply indicate that some merchants willingly pay more for a card that they perceive as more valuable to them than other payment cards.²⁶¹ A Ferrari costs more than a Mustang or a Camaro, but if Ford and Chevy collaborate, their prices will be anti-competitively high, albeit still lower than Ferrari’s unilaterally-set and hence lawful price. Ford and Chevy may lawfully exploit separately whatever market power is inherent in the Mustang or Camaro brand, but they must refrain from collaborating. Similarly, Citibank or Bank of America may exploit whatever market power they have, but the two may not collaborate.

Antitrust generally does not concern itself with supra-competitive unilateral pricing options, because market forces guard against potential consumer harm. Even in a market such as restaurants, where American Express is prevalent, one can readily find cases where it is not accepted but Visa and MasterCard are.²⁶² By exploiting its ability to charge higher prices to some merchants, American Express encourages competitive investment to close

²⁵⁹ *Id.*

²⁶⁰ As of year end 2004, American Express was estimated to have issued approximately 15 million charge cards out of nearly 40 million cards issued. *Get Rid of Your Green AmEx Card!*, Fox News.com, Sept. 6, 2005, <http://www.foxnews.com/story/0,2933,168354,00.html>.

²⁶¹ For example, in 2000, the Nilson Report, a credit card industry publication, found that American Express cardholders spend fifty percent more on their cards than the holders of other card brands did. American Express, Merchant Services, <http://www10.americanexpress.com/sif/cda/page/0,1641,13336,00.asp> (last visited June 6, 2007). American Express uses this finding in advertising to attract merchants. *Id.*

²⁶² In the past two weeks, my American Express card has been rejected by two local restaurants, one a chain and one a standalone operation. Both restaurants took Visa and MasterCard.

that quality gap. That the American Express fee is higher than the Visa/MasterCard fee thus reveals little about whether the latter fee is set at a supra-competitive level.

A more enlightening comparison for evaluating the optimality of interchange fee levels would be to compare Visa and MasterCard with the Discover Card system. Unlike American Express, but like Visa and MasterCard,²⁶³ virtually all Discover cards are revolving credit cards, and Discover does not have the sort of market power in its brand that would enable it to charge supra-competitive prices. Curiously, commentators have virtually ignored Discover.²⁶⁴

One exception is Stephen Bomse, who illustrates that the efficiency of revenue shifting from the merchant to the cardholder side is confirmed by Discover's no-fee, cash-back cards.²⁶⁵ Although his point is sound in that Discover, like all networks, shifts revenue toward the cardholder, he goes too far in asserting that Discover "charge[s] cardholders nothing and offer[s] them a cashback bonus."²⁶⁶ In fact, Discover charges its cardholders interest whenever they run a balance and penalty fees when they make a late payment or exceed their credit limit. That interest and fee revenue has enabled Discover to become and remain one of the most successful credit card issuers for more than two decades despite a merchant discount that is about 25 percent below Visa and MasterCard.²⁶⁷

Discover's success is a testament to the efficiency of a payment card system deriving revenue from interest and fee earnings and a relatively small merchant discount, but it does not confirm that the Visa and MasterCard interchange fees are above optimal levels. Discover might have been even more successful had it charged a higher merchant discount. Nevertheless, Discover's success confirms the *possibility* that existing interchange fees are too high.

²⁶³ The Visa and MasterCard systems include a variety of card products including debit and pre-paid cards. These cards with no credit component, however, have different merchant discount fees and are likely part of a separate market. *United States v. Visa U.S.A. Inc.*, 163 F. Supp. 2d 322, 336-37 (S.D.N.Y. 2001), *aff'd*, 344 F.3d 229 (2d Cir. 2003).

²⁶⁴ One might argue that Discover entered the market with low merchant discounts, because although it had the Sears cardholder base, it needed merchants. Yet Discover entered at the low end on the cardholder side as well, offering no annual fee, and cash back, at a time when very few issuers were offering either of those features. Discover has also maintained its low merchant discount even after establishing a merchant network nearly as extensive as the Visa/MasterCard network. *Id.* at 388-89.

²⁶⁵ See Bomse & Westrich *supra* note 257, at 653.

²⁶⁶ *Id.* at 665.

²⁶⁷ Within two years of its introduction, the Discover card garnered more than \$4 billion in receivables, ranking it third among card issuers. EVANS & SCHMALENSEE, *supra* note 2, at 77-78. As of 2002, Discover was the fifth largest issuer with seven percent of transaction volume and total outstanding balances. *Id.* at 13, 227. Discover has remained among the top card issuers even though its merchant discount is approximately 25% lower than that of Visa and MasterCard, *United States v. Visa*, 163 F. Supp.2d at 333, and even though it has 10 percent lower acceptance in the U.S. than Visa and MasterCard do., *id.* at 388-89.

g. *Perfect Issuer Competition*

Another argument in favor of non-intervention is that card issuing is so competitive that interchange revenue is quickly competed away in the form of lower cardholder prices and higher rebates.²⁶⁸ If interchange fee revenue were competed away, one would expect card systems to keep interchange fees low to maximize merchant acceptance.²⁶⁹ The only reason to increase interchange fees that issuers know will be competed away would be to enhance the efficiency of the system, which might occur if consumers required greater incentives to use cards than merchants require to accept them.

Laymen and lawyers not versed in economics tend to see credit card solicitations and low rate introductory offers as evidence that the issuing market approaches perfect competition.²⁷⁰ Economic analysis has been quite skeptical of that claim, recognizing that issuers would not expend so many resources trying to attract cardholders if they were not earning substantial profits. Card issuing may be profitable for those banks that solicit heavily because of the differences among issuing banks. Larger issuers may be more efficient because of economies of scale. Moreover, the associations have also cut special deals with many of the larger issuers, reducing their fees to levels below those of smaller issuers.²⁷¹ These factors may enable the large issuers to use interchange revenue to steal customers from smaller, less efficient issuers while still retaining substantial profits.

Although the large issuers surely compete with each other, American Express and Discover, they are able to differentiate themselves through marketing, customer service, and rewards programs, and thereby garner a measure of market power that may enable them to charge supra-competitive prices. As discussed above with respect to American Express, this sort of unilateral supra-competitive pricing does not raise antitrust concerns, but it does enable issuers to potentially retain profit from collectively set interchange fees, a practice that does have antitrust implications.²⁷²

²⁶⁸ For example, Tim Muris writes, “[i]f issuers receive less from merchants than they must receive more from consumers or reduce the benefits that consumers receive.” Muris, *supra* note 10, at 543. *See also* Klein et al., *supra* note 38, at 596 (“the evidence indicates that there is significant competition among issuers for cardholders. Issuers compete through setting cardholder fees, offering cash-back and rewards in kind (such as free airline tickets) to cardholders, and promoting their payment card programs. Higher interchange fees give issuers the incentive to compete for cardholders by offering greater rewards or lower cardholder fees. In fact, since interchange fees have increased, issuers have offered lowered fees and greater benefits in the form of cash-back, rewards in kind, and card enhancements to cardholders.”).

²⁶⁹ Rochet & Tirole, *supra* note 54, at 563.

²⁷⁰ *See infra* Appendix I.

²⁷¹ EVANS & SCHMALENSSEE, *supra* note 2, at 204.

²⁷² Some regulators have argued that issuers overproduce, that is, that they issue too many cards. This theory has been roundly criticized. EVANS & SCHMALENSSEE, *supra* note 2, at 122-24. Antitrust

B. *A Competitive Remedy*

This Article identifies reasons to suspect that interchange fees are anti-competitively high. This section presents a competitive remedy to that problem that a court could impose if it found that collectively set interchange fees in fact violate the antitrust laws. Even those who are confident that collectively set interchange fees are too high have shied away from competitive solutions to the interchange problem, believing that bilateral negotiations among each of the thousands of issuers and acquirers (or merchants) would pose inefficient transaction costs.²⁷³ They thus prefer cost regulation or point-of-sale surcharging to make interchange fees apparent to cardholders.²⁷⁴ This section sets out a competitive scheme that would require large issuers to compete on interchange fees by empowering merchants to refuse to accept the cards of a particular issuer. The following subsections outline how the scheme would operate and then responds to likely criticisms.

1. Large Issuer Interchange Fee Competition

A true competitive interchange-fee-setting structure could be achieved by partially eliminating the Visa and MasterCard system rules that require merchants that accept a system's credit cards to accept all cards within that system. The five largest card issuers—each of which is large enough to operate its own card system—would be required to set their own interchange fees separately from the fee that is collectively set by the Visa and MasterCard systems for the remaining issuers.²⁷⁵

Currently, American Express, Diner's Club, JCB, and Discover all maintain independent interchange fees, even though each of those systems has a share of transaction volume that is smaller than the largest Visa and MasterCard issuers. A single card reading terminal is capable of reading cards issued by all of those brands and routing the information in a way that differentiates among at least six different merchant discounts.²⁷⁶ Merchants are thus free to accept or reject these cards individually, and many mer-

enforcement authorities have rarely worried about overproduction made possible by excessive advertising, for example, because of the difficulty of determining what the optimal production level might be and how to craft a remedy that would bring it about. Wright, *supra* note 10, at 22.

²⁷³ As of 2003, there were over 8,000 credit card issuers in the United States. Chang, *supra* note 14, at 42 n.39.

²⁷⁴ See *supra* Part III for a discussion of alternative remedies and references to regulators, commentators, and litigants who have supported them.

²⁷⁵ This group would consist of: Citibank; Chase; Bank of America; and Capital One; and Washington Mutual.

²⁷⁶ EVANS & SCHMALENSSEE, *supra* note 2, at 259.

chants that accept some payment cards do not accept all of them. Surely, this technology could handle an additional half dozen merchant discount options from the Visa and MasterCard issuers that are as large as these independent card systems. If these issuers were required to set their own independent interchange fees, merchants could spur competition by threatening to drop a particular bank's card just as some merchants now refuse to accept Diner's Club or American Express.

The thousands of smaller issuers that account for less than 20 percent of transaction volume could continue to set their interchange fees collectively. In contrast to the large issuers that merchants could single out, merchants would be required to accept or reject cards issued by the small issuers as a group, as they now do for all Visa and MasterCard issuers. In the short run, competition might drive down the interchange fees of the large issuers while the fees of the smaller issuers remained high. Since the large issuers would continue to dominate the Visa and MasterCard systems, however, they would likely adjust the system interchange fees to bring them in line with the competitive fees.

This remedy fits well with both the economic and legal theory. If collectively set interchange fees enable card issuers to retain excess profits at the expense of consumers, the largest issuers who have the lowest costs are likely the prime beneficiaries of that illegal conduct. Requiring the large issuers to compete on interchange fees could solve the competitive problem without the costs and complications of requiring each issuer to set its interchange fees independently. As a matter of law, a collectively set interchange fee may be necessary to retain the benefits of smaller issuers and acquirers. There is thus a legal basis for distinguishing between the handful of large issuers that can compete without a collectively set interchange fee and the thousands of small issuers that cannot.

Importantly, this remedy would not require the inefficient start-up of new card systems. No new system has entered the market since Discover in the mid-1980s, despite increasing merchant discount fees. Forcing large issuers to form their own systems could seriously disrupt the industry. The proposed remedy would thus enable the large issuers to remain part of the Visa and MasterCard systems. They could continue to rely on Visa and MasterCard acquirers to sign merchants; use all of the Visa and MasterCard systems; and pay fees to those systems as they now do. The only change would be that a particular merchant could demand that one or more large issuer negotiate the interchange fee separate from the Visa or MasterCard fee. If a mutually agreeable fee could not be negotiated, the merchant could drop that issuer's cards while still accepting all other Visa and MasterCard cards.

2. Criticisms of the Competitive Remedy

A likely criticism of this proposal is that it would undermine the credit card systems vis-à-vis alternative forms of payment if, for example, merchants that generally accept Visa cards were not required to accept *all cards* bearing the Visa mark. Evans and Schmalensee comment that “the honor-all-cards rule appears to have been used by all systems throughout the history of the industry. It ensures the cardholder side of the market that their cards will be accepted on the merchant side.”²⁷⁷

Twenty years ago, having a card rejected at the point of sale may have discouraged many consumers from using cards. There may thus have been strong reasons for an honor-all-cards rule when the card business was first gaining a foothold. One is hard pressed, however, to explain any continuing need for the rule. Over the years, issuers have taken over more and more of the face of the card to identify themselves, reducing the size of the Visa or MasterCard logo. As a result, many consumers now associate their card more with the issuing bank than with Visa or MasterCard. One could thus easily imagine *non-acceptance* decals, indicating for example, that Citibank cards are not accepted at a particular merchant. Just as cardholders understand that some merchants do not accept American Express, they would learn that some merchants do not accept Citibank.

Moreover, the experience of having a card rejected is now quite common. Most cardholders who use a Discover or American Express card have had this experience.²⁷⁸ Even Visa and MasterCard users may have had their cards rejected through the authorization process, most often when the cardholder has exceeded the credit limit, but also when an issuer’s system suspects that the transaction may be fraudulent.

Today, the experience of having a card rejected is unlikely to drive cardholders away from credit cards.²⁷⁹ A cardholder might understandably

²⁷⁷ EVANS & SCHMALENSEE, *supra* note 2, at 292; *see* Baxter, *supra* note 43, at 576. Klein et al., *supra* note 38, at 592 (“An honor-all-cards rule is the essence of a payment card system because it assures each cardholder that his card will be accepted at all merchants that display the mark of the card’s payment card system. If merchants could decide which issuer’s cards of a particular payment system they would accept, the benefits of guaranteed acceptance would be undermined and the value of the payment card system would be diminished. Individual merchants cannot independently decide whether or not to accept a particular issuer’s version of the payment card without substantially damaging the reputation of the entire payment card system.” (footnote omitted)).

²⁷⁸ I personally have had a card rejected even when a sticker for the card appeared in the merchant’s window. When I have inquired, the answer has been that the merchant’s acquirer raised the price for that brand, so the merchant decided to stop accepting it.

²⁷⁹ If one were nonetheless concerned about the impact of eliminating the honor-all-cards rule for the largest issuers, one could advocate a default rule under which merchants would accept Visa and MasterCard cards at a zero interchange fee if (1) no agreement had been reached with the large issuer, and (2) the large issuer had not notified processors to block acceptance of its card. In this way, large

be hesitant to use the particular rejected card again and therefore switch to a different one. But that is the point of requiring individually set interchange fees. The hope would be that the negative impact on an issuer of having its card rejected would create competitive downward pressure on interchange fees.²⁸⁰

Another potential risk of the proposed competitive remedy is that the individual large issuers would retain sufficient market power that they could continue to demand supra-competitive interchange fees. If merchants proved unwilling to stop accepting cards by individual large issuers, those issuers might even increase their own interchange fees to levels higher than the current collectively set fees. Many merchants, however, have demonstrated a willingness to refuse to accept cards issued by American Express, which has a large and attractive cardholder base. That practice is likely a good indication that merchants would be willing to reject the cards of particular large issuers, enabling competition among issuers to dictate interchange fees as it does all of the other cardholder and merchant fees.

CONCLUSION

Antitrust law is grounded in the belief that competition benefits society and that competitive problems can be identified and addressed through the legal system even though economists have yet to fully model the behavior in question. Competition, however, is not a simple concept. Identifying the state of affairs that maximizes beneficial marketplace rivalry is often far from obvious in large part because rivalry in all dimensions is not practically possible. Groups must work cooperatively to produce almost any product, and agreements, for example on standards for card readers, can often have huge procompetitive benefits. Although economic certainty is a myth that one should not demand as a prerequisite to antitrust enforcement, one cannot thoughtfully analyze complex competition policy without taking account of available economic learning. The antitrust laws legislate *faith* in competition, but that faith should not be blind to economic reality.

issuers could avoid the negative impact of having their cards rejected while they sought to negotiate an acceptable fee with certain merchants.

²⁸⁰ First Data suggested an alternative form of beneficial competition in interchange fees during litigation against Visa. *Visa U.S.A. Inc. v. First Data Corp.*, No. C-02-1786 JSW, 2006 WL 1310448 (N.D. Cal. May 12, 2006). First Data argued that banks could assemble intra-processor groups that could offer point-of-sale discounts through merchants to consumers who use particular issuers' cards and thereby attract additional volume and cardholders to the issuers in exchange for lower interchange fees for the merchant. *Id.* at *3.

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APPENDIX I

Solicitations Received at Home Address September-October 2006

CARD ISSUER	SYSTEM	INITIAL RATE FOR PURCHASES/PERIOD	GO TO RATE	ANNUAL FEE	REWARDS
Chase	Visa	0%/6 months	16.90%	\$59.00	SouthWest Airlines Rapid Rewards (up to 9 for using account and transferring balance then 1 per \$1200 spend
Chase* *	MC	0%/6 months	14.24%	\$85/\$65	Continental Airlines Frequent Flier Miles 20K + 1 per dollar + 5% discount on tickets
Chase	Visa	None	18.24%	\$60/first year free	United Airlines Frequent Flier Miles 20,500 + 1 per dollar spend
Chase	Visa	0%/12 months	15.24%	0	Amazon.com reward points
Chase	MC	0%/12 months	8.99%	0	1-3% cash back
Citi	Amex	None	18.24%	\$50/first year free	American Airlines Frequent Flier Miles 25K + 1 per dollar spend
Citi*	MC	0%/8 months	13.24	0	None
Citi	MC	0%/11 months	10.24	0	None
Discover	Disc	0%/10 months	11.99%	0	1-5% cash back
Fidelity Investments	Visa	0%/14 months	13.90%	0	1.5% invested in Fidelity Account at \$5000 spend level
FIA Card Servs	MC	0%/12 months	15.24%	0	NFL logo wind jacket & blanket; points accrue for NFL gear; 10 weeks of a magazine
FIA Card Servs	Visa	None***	9.9% or 15.99%	0	NFL logo wind jacket & blanket; points accrue for NFL gear; 10 weeks of a magazine

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CARD ISSUER	SYSTEM	INITIAL RATE FOR PURCHASES/PERIOD	GO TO RATE	ANNUAL FEE	REWARDS
HSBC	MC	0%/15 months	14.99%	0	3% toward purchase of GM vehicle or 1% cash back
HSBC* *	MC	None***	11.24%- 19.24%	0	1% cash back
RBS Na- tional	MC	None***	14.99%	0	1-3% free groceries at Ralph's/Krogers
State Farm	Visa	None***	13.74%	0	1% toward State Farm Products
U.S. Bank	Visa	None***	14.15%	0	None
U.S. Bank	Visa	0%/12 months	14.15%	0	None

* Offer addressed to old resident, not me or my wife.

** My wife and I received identical offers.

*** Although this offer did not include an introductory rate on purchases, it did include a 0% introductory rate for balance transfers.