The Antitrust Super Bowl: America's Payment System, No-Surcharge Rules, and the Hidden Costs of Credit

Adam J. Levitin
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ABSTRACT

Whether a customer pays with cash, check, PIN- or signature-based debit card, or credit card, the transactions costs imposed on the merchant differ widely. Credit card networks’ no-surcharge rules, however, prevent the merchant from passing those different costs along to the customer. These no-surcharge rules are anti-competitive and cause an inefficient over-consumption of credit at the expense of other payment systems. Moreover, no-surcharge rules result in substantial negative social and economic welfare effects, including inflation, decreased consumer purchasing power because of greater debt service, lower savings rates, more consumer bankruptcies, inequitable subsidization of credit consumers by non-credit consumers, and unnecessary subsidization of the entire credit card industry outside the political process. This article is the first piece of legal literature to examine no-surcharge rules in the age of expanding electronic payment systems and rising consumer bankruptcies and to connect no-surcharge rules to social welfare issues.

No-surcharge rules are coming under scrutiny in the United States and abroad. The Federal Reserve Board has embarked on its first-ever comprehensive review of cash-credit pricing differentials and Regulation Z, which implements the Truth-in-Lending Act. Recent antitrust examination of credit card networks in the United States and Europe may signal that the Board is willing to inspect closely many credit card company practices. Australia’s marked drop in demand for credit cards after banning surcharge restrictions in 2003 may also play into the Board’s stated concern over the rapidly increasing growth of consumer debt in the United States. Even if the Federal Reserve Board fails to act, the growth of the major credit cards networks’ products at the expense of other payment systems networks may lead to private antitrust actions directed at no-surcharge rules. The potential legal challenges would be the “Super Bowl” of antitrust litigation, dwarfing the record $3.05 billion

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antitrust settlement Visa and MasterCard reached with Wal-Mart in 2003 over their restrictions on debit-card pricing. Indeed, no-surcharge rules' role in payment system economics will undoubtedly gain increased attention over the next few years, and the abolition of no-surcharge rules will dramatically change Americans' payment and debt behavior.

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I. INTRODUCTION: THE ANTITRUST SUPER BOWL

Over the past two years, MasterCard and Visa, the major credit card networks, have been pummeled by antitrust litigation. In 2003, they settled an antitrust suit brought by Wal-Mart for a record $3.05 billion dollars. In 2004, the Supreme Court denied the card networks’ appeals from a Second Circuit ruling that they could not prohibit member banks from issuing American Express or Discover brand cards. Card processing companies, merchants, and consumers have also filed a variety of contract and antitrust suits. These actions are part of a global trend of increased antitrust scrutiny of credit card networks. The cases thus far have been mere skirmishes, the playoffs, as it were, for what promises to be the “Super Bowl” of antitrust litigation: suits by merchants and consumers alleging that the card networks’ setting of interchange rates and related no-surcharge rules are illegal, anti-competitive behaviors.

The kickoff for the antitrust Super Bowl took place on June 22, 2005, when a class-action suit was filed by several small merchants against MasterCard and Visa and their member banks, alleging, among other claims, that the networks’ setting of their interchange fee structure was a violation of antitrust laws. Three weeks later, six of the nation’s largest supermarket and drugstore chains filed suit against Visa for a variety of antitrust violations, including horizontal price-fixing in the setting of its interchange rates, anti-tying violations for requiring merchants to accept all varieties of Visa credit cards, and a number of illegal restraints on trade, including no-surcharge rules. An identical suit was

5. See Robin Sidel, Merchant Group Sues Visa over Card-Use Fees, WALL ST. J., July 15, 2005, at C3; see also The Kroger Co. v. Visa U.S.A., Inc., No. 05-CV-6409 (S.D.N.Y. filed July 14, 2005),
later filed against MasterCard.\textsuperscript{6} At least forty-nine similar suits based on interchange rate setting and various contractual restraints of merchant pricing were filed by March 2006.\textsuperscript{7} These suits are the beginning of what promises to be a round of gargantuan antitrust suits focused on payment systems’ interchange fees and no-surcharge rules, with potential damages in the tens or hundreds of billions of dollars, the “most economically significant antitrust case since the AT&T litigation in the early 1980s.”\textsuperscript{8}

Not only are substantial sums implicated in these suits, but they also have the potential for changing American’s consumption of credit and the American payments landscape. Payment systems are often ignored, but they are the backbone of America’s commercial infrastructure. The credit card industry is on the verge of a “perfect storm,” as regulatory scrutiny, private (and potentially government) antitrust suits, and competition within the payment industry and lending community converge.\textsuperscript{9} Indeed, these are important if not leading factors behind MasterCard’s planned initial public offering, and speculation that Visa will undertake an IPO, as the banks that own credit card brands are seeking to reduce their potential liability.\textsuperscript{10} America’s payment systems are in the midst of a major transformation spurred in part by technological developments, but also to a large degree by legal concerns.

II. PAYMENT SYSTEM PRICING VS. COSTS, AND THE OVER-CONSUMPTION OF CREDIT

Over the past thirty-five years, Americans have displayed an increasingly voracious appetite for purchasing with plastic. The percentage of goods and services purchased using credit and debit cards has risen from 6% in 1984, the first year when such statistics were compiled, to 22% in 1996.\textsuperscript{11} This trend has continued unabated during the last decade,\textsuperscript{12} in part because credit cards have

\textsuperscript{6} MasterCard Is Sued by Group of Retailers over Mounting Fees, WALL ST. J., Aug. 4, 2005, at C4.


\textsuperscript{11} See DAVID S. EVANS & RICHARD L. SCHMALENSEE, PAYING WITH PLASTIC: THE DIGITAL REVOLUTION IN BUYING AND BORROWING 23 (1999).

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become the dominant method of payment for the rapidly expanding market of Internet transactions. In 2003, credit and debit cards comprised 42% of all noncash purchases, and in 2004, the number of electronic payments exceeded the number of paper checks written in America.

Table 1. Percentage of Total Dollar Volume of U.S. Transactions by Payment Method

<table>
<thead>
<tr>
<th>Payment Method</th>
<th>1990</th>
<th>2003</th>
<th>2008 (prediction)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Checks</td>
<td>51.09%</td>
<td>34.71%</td>
<td>19.83%</td>
</tr>
<tr>
<td>Cash</td>
<td>25.04%</td>
<td>20.95%</td>
<td>15.66%</td>
</tr>
<tr>
<td>Credit Cards</td>
<td>18.58%</td>
<td>23.85%</td>
<td>29.60%</td>
</tr>
<tr>
<td>Debit Cards (all Types)</td>
<td>.37%</td>
<td>9.67%</td>
<td>16.49%</td>
</tr>
<tr>
<td>Other Payment Systems</td>
<td>4.92%</td>
<td>10.82%</td>
<td>18.42%</td>
</tr>
</tbody>
</table>

Source: NILSON REPORT, Issue 823, at 6 (Dec. 2004); NILSON REPORT, Issue 761, at 6-7 (Apr. 2002).

Table 2. Percentage of U.S. Transactions by Payment Method

<table>
<thead>
<tr>
<th>Payment Method</th>
<th>1990</th>
<th>2003</th>
<th>2008 (prediction)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Checks</td>
<td>38.00%</td>
<td>21.65%</td>
<td>16.00%</td>
</tr>
<tr>
<td>Cash</td>
<td>45.30%</td>
<td>41.33%</td>
<td>33.14%</td>
</tr>
<tr>
<td>Credit Cards</td>
<td>14.06%</td>
<td>17.28%</td>
<td>18.57%</td>
</tr>
<tr>
<td>Debit Cards (all Types)</td>
<td>0.33%</td>
<td>13.02%</td>
<td>20.77%</td>
</tr>
<tr>
<td>Other Payment Systems</td>
<td>2.31%</td>
<td>6.72%</td>
<td>11.52%</td>
</tr>
</tbody>
</table>


Not surprisingly, Americans’ credit card debt has also accumulated. Total outstanding credit card debt has increased almost ten-fold, from $71 billion in

The number of credit card transactions in the United States more than tripled form 1990 to 1999, from 4.6 billion to 14.2 billion. Over the same period, dollar volume increased from $337 billion to $1,096 billion. See id.

13. Id.


15. See Electronic Payments Surpass Paper Checks, USA TODAY, Dec. 6, 2004. Credit cards alone had already surpassed checks as the most common payment method at point-of-sale. See Chakravorti & Shah, Interrelated Bilateral Transactions, supra note 12.
1980 to $675 billion in 2000, representing no less than 12% of personal income. In 2003, Americans’ revolving, non-float credit card debt was $2,293 per person, $3,632 per cardholder, $6,400 per household, and $8,000 per card-holding household. Americans’ per capita real credit card debt is double that of Britons and more than triple that of Australians. What is fueling Americans’ ravenous drive towards plastic?

Convenience, technological improvements, easier access to credit, and greater costs of living relative to cash are all factors that have pushed Americans to use plastic for more of their transactions. Another factor, however, that has received relatively little examination is how the current system of legal rules in the United States, combined with this well-known behavioral bias, has equalized the cost of all payment systems at point-of-sale to consumers. Therefore, when making payment decisions at point-of-sale, consumers merely consider the benefits rather than the costs of different payment systems.

For merchants, acceptance of a method of payment is a distinct service from the underlying good or service being purchased. The price of payment, however, is typically bundled with the price of underlying purchase, so that the consumer does not see an itemized cost for the chosen mode of payment. Different means of payment—cash, check, debit, credit—have different costs for merchants. Credit card transactions, for example, cost retailers on average six times that of cash transactions and at least twice as much as checks or PIN-based debit.

Table 3. COST OF TENDER FOR A FORTUNE 100 RETAILER

<table>
<thead>
<tr>
<th>PAYMENT OPTION</th>
<th>COST OF TENDER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Check</td>
<td>$0.21</td>
</tr>
<tr>
<td>On-Line Debit Card (PIN)</td>
<td>$0.29</td>
</tr>
<tr>
<td>Off-Line Debit Card</td>
<td>$0.45</td>
</tr>
<tr>
<td>Credit Card</td>
<td>$0.52</td>
</tr>
</tbody>
</table>


19. See id.
20. One study found that consumers use credit cards primarily because of convenience (49% of respondents mentioning the factor), followed by earning rewards points (29%), purchase protection (25%), and ability to finance purchases (21%). CardTrak, Card Debt (Apr. 2004), http://new.cardweb.com/cardtrak/pastissues/april2004.html.
Table 4. GROCERY RETAILER COST ESTIMATES FOR DIFFERENT PAYMENT INSTRUMENTS IN 2000 FOR THE US

<table>
<thead>
<tr>
<th>PAYMENT OPTION</th>
<th>COST PER TRANSACTION</th>
<th>COST PER $100 SALES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$0.12</td>
<td>$0.90</td>
</tr>
<tr>
<td>Check</td>
<td>$0.36</td>
<td>$0.80</td>
</tr>
<tr>
<td>Debit Card</td>
<td>$0.34</td>
<td>$0.80</td>
</tr>
<tr>
<td>Credit Card</td>
<td>$0.72</td>
<td>$1.80</td>
</tr>
</tbody>
</table>

Source: David Humphrey et al., *What Does It Cost to Make a Payment?* 2 Rev. of Network Econ. 159, 162 (2003).

Table 5. RETAILER PAYMENT COSTS IN US IN 1996

<table>
<thead>
<tr>
<th>PAYMENT OPTION</th>
<th>COST OF TENDER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$0.12</td>
</tr>
<tr>
<td>Check</td>
<td>$0.34</td>
</tr>
<tr>
<td>On-Line Debit Card (PIN)</td>
<td>$0.36</td>
</tr>
<tr>
<td>Credit Card &amp; Off-Line Debit Card (Signature)</td>
<td>$0.72</td>
</tr>
</tbody>
</table>

Source: David Humphrey et al., *What Does It Cost to Make a Payment?* 2 Rev. of Network Econ. 159, 162 (2003).

Therefore, one would expect to see these costs reflected in merchants’ bundled pricing of payment and goods or services. Identical goods and services purchased using different payment systems should have different costs to reflect the cost of the payment system. And yet, the current system of public and private law, combined with a well-documented consumer behavior bias, forces merchants to price the same for credit card, off-line debit, on-line debit, check, and cash transactions.

Price differentiation signals the relative costs of a good or service to buyers, so the restraints on payment system pricing prevent adequate cost signaling to consumers. Instead, at point of sale, consumers perceive all payment systems as having the same transaction costs. This makes more expensive payment systems, such as credit cards, seem relatively cheaper, and cheaper systems,

22. See, e.g., MICHAEL L. KATZ, RESERVE BANK OF AUSTRALIA, REFORM OF CREDIT CARD SCHEMES IN AUSTRALIA II: COMMISSIONED REPORT 38 (2001) (“No-surcharge rules alter the nature of competition and thwart the use of retail price signals to guide consumers’ choices among payment mechanisms.”).
like cash, relatively more expensive than if priced at cost. Accordingly, consumers choose among systems based on factors other than cost, such as convenience, fraud liability, and cash flow constraints. This focus on the benefits and not on the transaction costs causes consumers to under use the cheapest systems for merchants and to overuse the system that offers consumers the most non-purchase price benefits: credit cards.\(^\text{23}\) Indeed, the existence of cash back rebates and rewards programs, not to mention a typical 30-day float, actually makes credit \textit{cheaper} than any other payment system for consumers who pay their bills in full and on-time.\(^\text{24}\)

If merchants\(^\text{25}\) were allowed to signal the cost of payment systems in their pricing, consumers would be forced to internalize the relative cost of their choice of payment system and would be more likely to choose a cost-benefit efficient payment system. Payment systems such as highly fraud-resistant PIN-based debit cards\(^\text{26}\) would likely gain greater market share, and the barriers to entry for new electronic payment systems would be lower. Non-credit purchasers would not end up unwittingly subsidizing credit purchasers.\(^\text{27}\)

Forcing consumers to internalize the cost of their choice of payment system would encourage Americans to use credit more wisely,\(^\text{28}\) increase Americans’

\(^{23}\) The inability of merchants to signal cost of payment also results in an over-consumption of the underlying goods or services since the decision to purchase is interlinked with the decision regarding payment methods. Credit payments enable purchases that could not otherwise be executed due to fiscal and liquidity constraints. Therefore, a consumer who does not know the cost of a credit payment cannot do a complete cost-benefit analysis for the underlying purchase.

\(^{24}\) See infra Part VIII.D.

\(^{25}\) Consumers can only internalize the cost of credit \textit{ex ante} if it is presented at point-of-sale, by the merchant, rather than later in the form of a direct charge from the issuer on their bank statements. Alan S. Frankel, \textit{Monopoly and Competition in the Supply and Exchange of Money}, 66 ANTITRUST L.J. 313, 350-51 (1998). The chances are that consumers’ decisions about which payment system to use going forward will not be as strongly impacted by \textit{ex post} charges on their bank statement. Indeed, consumers appear often to blame the merchant and not the card issuer for \textit{ex post} charges, even though \textit{ex post} charges are imposed by the issuer, as has been the case with debit card usage fees. See generally NYPIRG, \textit{SUBMISSION OF THE BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM RE: DOCKET NO. OP-1196, DEBIT FEE DISCLOSURES} (July 23, 2004), available at http://www.federalreserve.gov/SECRS/2004/July/20040727/OP-1196/OP-1196_95_1.pdf.

\(^{26}\) The fraud loss rate on PIN-based, on-line debit cards is about 0.0003%. See http://www.greensheet.com/pdf/030201.pdf. The fraud loss rate for MasterCard and Visa credit cards has decreased to 0.06%. See \textit{VISA, 2004 ANNUAL REPORT} 10, available at http://usa.visa.com/download/about_visa/annual_report.pdf.

\(^{27}\) See infra Part XIII. Two empirical studies have revealed that cash consumers have overpaid by 1.5% in order to subsidize credit consumers. See John M. Barron et al., \textit{Discounts for Cash in Retail Gasoline Marketing}, 10 CONTEMP. ECON. ISSUES 89, 102 (1992). This is the published version of a working paper, John M. Barron et al., \textit{Discounts for Cash in Retail Gasoline Marketing} 6 (Credit Research Ctr., Kannert Graduate Sch. of Mgmnt., Purdue Univ., Working Paper No. 57, Sept. 1991) [hereinafter Barron et al., \textit{Working Paper}]. The published version is in a reduced form, albeit with identical conclusions.

\(^{28}\) Consumers exhibit a dangerous underestimation bias in their use of credit purchases and believe that they will be able to pay off their bills in full and on time far more often then they actually can. Oren Bar-Gill, \textit{Seduction by Plastic}, 98 NW. U. L. REV. 1373, 1396-402 (2004); see also Drazen Prelec & Duncan Simester, \textit{Always Leave Home Without It: A Further Investigation of the Credit-Card Effect on Willingness to Pay}, 12 MARKETING LETTERS 5, 11 (2001).
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rate of savings,29 potentially decrease the alarming number of consumer bankruptcies,30 have an anti-inflationary effect on the economy, and result in lower net costs of goods and services for non-credit purchases, thus potentially increasing Americans’ non-credit purchasing power. Fewer credit purchases could also result in Americans spending less of their annual income on debt service, which could increase their purchasing power of other goods and services.

III. THE HISTORICAL BACKGROUND

Federal, state, and private law have combined to place a number of constraints on merchants’ ability to price according to payment system. The history of these constraints is important, for although the constraints have shifted from federal law to state and private law, the arguments applicable at the federal level apply with equal force at the state and private level. As a preliminary matter, it is necessary to understand the basic structure of credit card payment systems. Most of the analysis applies equally to a consideration of debit card networks no-surcharge rules, an issue taken up in Section XVIII.F, infra. For the sake of clarity, however, unless otherwise noted, this article deals with a binary division of payment systems between credit cards and all other common consumer payment systems: cash, personal checks, off-line and on-line debit.

Most credit card transactions are conducted using one of the brands of the major card networks: MasterCard, Visa, American Express, and Discover.31 The payment systems represented by these networks come in two basic types: open or closed network. Open payment networks, such as MasterCard and Visa, allow many banks to participate. In any given transaction in an open payment network, one bank acts as the card issuer, and another acts as the acquirer bank. The same banks regularly play both roles in a network and at times act as both issuer and acquirer in the same transaction. When a consumer transacts with a merchant, the issuer bank agrees to transfer funds to the merchant’s acquirer bank. The merchant is then able to draw on funds at the acquirer bank, and the issuer bank sends the consumer a bill for the funds transferred.

The transfers, however, do not take place for free. The issuer bank charges

31. In-house retail cards like those issued by gas stations and department stores are anomalous in regard to surcharge restrictions. See infra Part XVIII.G.
the acquiring bank a percentage of the sales fee, known as the interchange fee. The network association—MasterCard or Visa—sets the interchange fee. The acquiring bank in turn charges the merchant a percentage of the sales fee, known as the merchant discount rate, which will be set high enough to cover the interchange fee. The merchant discount fee is in addition to other fees the acquiring bank typically charges the merchant for serving as its acquiring bank. The acquiring bank bargains with the merchant to set the discount rate. In closed payment networks, such as American Express and Discover, the card issuer is also the acquiring bank, so there is no interchange fee. These networks still charge a merchant discount fee.

After their introduction in early 1950s, credit cards represented a miniscule percentage of the total number or dollar volume of consumer transactions in the first few decades. Accordingly, there was only minimal federal or state regulation of the credit card industry other than usury restrictions. Instead, credit cards were governed by two tiers of private agreements—those between the card network and acquiring and issuing banks, and those between the acquiring banks and merchants on the one side and between the issuing banks and cardholders on the other. The latter tier of agreements often incorporated the credit card networks' operating rules by reference. Standard parts of the operating rules were the so-called No-Surcharge Rules and No-Discount Rules. These rules prohibited merchants from charging a consumer a different price for a purchase with one of the network’s credit cards than would be charged for any other method of payment.

Consumer advocacy groups saw no-surcharge/no-discount rules as negatively affecting cash consumers, and in February 1974, the Consumers Union sued American Express on the grounds that its no-surcharge/no-discount rules was a restraint on trade constituting an antitrust violation. American Express settled the suit two months later by agreeing to allow merchants to offer cash discounts. The Consumers Union reportedly reached subsequent settlements with other card issuers. Merchants, however, were unable to take

32. In 1984 all payment cards—consisting of mainly of credit cards, but also charge cards, and debit cards—were used for only 6% of the total volume of personal consumption in the United States. Evans & Schmalensee, supra note 11, at 25.
33. State usury restrictions were eviscerated for most purposes by the Supreme Court’s decision in Marquette National Bank of Minneapolis v. First of Omaha Service Corp., 439 U.S. 299, 309 (1978), which held that the applicable interest rate for a national bank is that of the state in which it is located, as determined by its certificate of organization. Thus began a race to the bottom, with most national banks moving their headquarters to states like Delaware and South Dakota with very high usury ceilings or no usury restrictions at all.
34. The no-surcharge rule is known as the “no-discrimination rule” in Europe.
35. I have not been able to find any indication of when credit card networks began to include no-surcharge rules in their operating rules or agreements with merchants.
37. Id. at 220 n.2.
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advantage of the settlement because of the disclosure requirements at the heart of a major piece of pro-consumer legislation, the 1968 Truth in Lending Act (TILA). 38

TILA required lenders, including credit card issuers, to disclose the cost of credit ex ante through two uniform components: the "finance charge" and the "annual percentage rate" (APR). TILA deemed any difference between the price of a cash transaction and a credit transaction, whether by cash discount or credit surcharge, to be part of the cost of credit, so it had to be included in mandatory ex ante disclosures. TILA's disclosure obligation is on card issuers, but merchants determine pricing on a good-by-good or service-by-service basis. Two-tiered pricing made adequate TILA disclosures nearly impossible for card issuers because credit card networks cannot calculate and disclose ex ante what the APR would be for every single good or service. 40 Moreover, TILA regulations required the conversion of surcharge and discounts into an APR based on the assumption that the surcharge or discount was for a 30-day extension of credit. This meant that a 5% surcharge would increase the APR by an immense 60%, which would (perhaps rightly) scare potential credit consumers and, at least before 1978, violate state usury ceilings. 41

Not content with antitrust settlements alone, consumer groups pressed Congress to amend TILA to allow for cash discounts. 42 Given the antitrust settlements with the Consumers Union, some credit card networks had little incentive to fight to keep their no-discount rules. After it appeared that some kind of bill would pass, though, the credit card lobby turned its attention toward preserving their no-surcharge rules. 43 The result was that Congress amended TILA in 1974 to permit cash discounts, but of no more than five percent, subject to proper disclosure. 44 Congress instructed the Federal Reserve Board (FRB) to draft disclosure regulations. 45 While working on the regulations, the FRB was unsure if Congress intended the five percent discount limitation to also apply to surcharges given their economic equivalence. 46 Congress responded in 1976 by specifically prohibiting credit surcharges for three

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42. Kitch, supra note 36, at 224.
45. Id.
46. 61 FED. RES. BULL. 638 (1975) (statement by Jeffrey M. Bucher, Member, Board of Governors of the Federal Reserve System, before the Subcommittee on Consumer Affairs of the Committee on Banking, Housing, and Urban Affairs, U.S. Senate, Oct. 9, 1975); see also S. REP. NO. 97-23, at 2 (1981); see also Kitch, supra note 36, at 225.
years. Congress also exempted discounts from state usury and disclosure rules. The committee reports contain no explanation for the decision to ban surcharges but to permit limited discounts. Congress renewed the surcharge ban in 1978 for an additional three years but let the ban lapse in 1981. Several months later, and "only after considerable debate and the addition . . . of a requirement that a study be prepared by the Federal Reserve Board," Congress passed the Cash Discount Act, which eliminated the arbitrary five percent limit on cash discounts but reinstated the surcharge ban for a further three years.

The Senate Committee Report on the Cash Discount Act portrayed the Act as a pro-consumer action, but this is suspect. Major consumer groups, such as the Consumer Federation of America and the Consumers Union, opposed the Cash Discount Act's continuation of the surcharge ban. Moreover, the Committee's logic, as expressed in the Report, makes little sense from a pro-consumer standpoint. Although the Committee recognized that "discounts for cash and surcharges on credit cards may be mathematically the same," it argued that "their practical effect and the impact they may have on consumers is very different." The Report claims that two-tiered pricing is deceptive because the sticker price is not always the price paid. Allowing cash discounts, the Report argued, would add some price flexibility into the system while guaranteeing

49. The ban lapsed on Feb. 27, 1981. It was renewed as of July 27, 1981. See supra note 48.
52. Id. § 201 (extending the surcharge ban for three years).
54. Id. at 10, 16 (1981). The surcharge ban was also opposed by several government agencies, including the Federal Reserve Board, the Federal Trade Commission, the Office of Comptroller of the Currency, the Federal Home Loan Bank Board, and Credit Union Administration. See id.; see also 70 FED. RES. BULL. 102 (1984) (statement of Nancy H. Teeters, Member, Board of Governors of the Federal Reserve System, before Subcommittee on Consumer Affairs of the Committee on Banking, Housing, and Urban Affairs, U.S. Senate, Feb. 7, 1984). The Federal Reserve Board has been consistent in its questioning of the surcharge restriction. See, e.g., 67 FED. RES. BULL. 235 (1981) (statement of Nancy H. Teeters, Member, Board of Governors of the Federal Reserve System, before Subcommittee on Consumer Affairs of the Committee on Banking, Housing, and Urban Affairs, U.S. Senate, Feb. 18, 1981).
56. Id. at 4.
that the sticker price would be the highest price possible:

[ ] Permitting unlimited cash discounts and prohibiting surcharges allows the competitive free market to operate. Merchants can utilize two-tier pricing systems and thereby price cash purchases lower than credit purchases, if they choose to do so.

But they cannot implement two-tier pricing systems which deceive or mislead the consumer. By permitting only cash discounts, the Committee intends to assure that consumers will be seeing at least the highest possible price they will have to pay when they see a tagged or posted price. In other words, consumers cannot be lured into an establishment on the basis of “low, rock-bottom price” only to find at the cash register that the price will be higher if a credit card is used.

Two-tiered pricing, either through discounts or surcharges, makes it more difficult for consumers to compare prices, unless merchandise is routinely tagged with both prices and sales quotes are given for both cash and credit. Yet, there is no reason to think that a comparison of maximum prices (allowing discounts, but not surcharges) is any better than a comparison of minimum prices (allowing surcharges, but not discounts).

The FRB and Federal Trade Commission could create clear, disclosure-forcing pricing guidelines that would be inexpensive for merchants to implement. Indeed, although a merchant could use two-tiered pricing to lure in customers, consumers can walk away if abused, so merchants who use bait-and-switch pricing might well lose customers. And, given that a merchant who charges a credit surcharge is offering this advertised price, although only for cash payments, there is nothing per se deceptive. Only convenience and cash flow impede a consumer from paying in cash instead of credit, and these are poor policy grounds for protecting surcharges restrictions. Given that disclosure, and not usury rates or price restraints, was at the heart of TILA, if a merchant gives fair notice that all credit purchases will be surcharged at a specified rate, has TILA’s goal not been met? And if so, how exactly has the customer been harmed?

The Senate Banking Committee’s concern about surcharges, but not discounts, also reflects and demonstrates the important behavioral pattern of framing biases that interplay with the law and amplify its effects. The Committee worried that consumers who are charged a surcharge will feel penalized, but the Committee found acceptable that consumers receiving a cash discount will feel like they got a bargain. This results despite the fact that there is no economic difference between these situations. Rather it is like choosing to call a glass half full or half empty and not changing the amount of liquid it contains. The Committee acknowledged the economic equivalence of cash

57. Id.
58. Id. at 11-12 (1981) (letter from Chairman Michael Pertschuk to Senator William Proxmire).
59. See supra note 54.
discounts and credit surcharges, but its concern about the surcharged consumer being penalized exhibited the same behavioral bias that consumers have to surcharges and discounts, which is hardly surprising, as Senators are themselves consumers.

IV. COGNITIVE PROBLEMS: THE FRAMING BIAS AND THE UNDERESTIMATION BIAS

There is a large body of psychological and economic literature on cognitive biases—the manner in which the typical human mind will routinely misjudge a situation—and there is a growing body of legal work that incorporates the insights from this literature. A full exploration of cognitive biases and payment systems is beyond the scope of this article. A brief discussion, however, is necessary, as a pair of cognitive biases—the framing bias and the underestimation bias—are essential building blocks both for the debate about credit surcharging and for the actual functioning of credit card networks.

A. The Framing Bias

Consumers react very differently to surcharges and discounts, as the language of pricing frames the information conveyed to the consumer. As Jon D. Hanson and Douglas A. Kysar have noted, "the frame within which information is presented can significantly alter one’s perception of that information, especially when one can perceive the information as a gain or a loss." The different framing effects of a discount or a surcharge are powerful. It is a well-documented behavioral bias that people have stronger reactions to losses and penalties than to gains. For example, in a recent survey of Dutch consumers' opinions on credit card surcharges and cash discounts, attitudes were substantially more negative towards surcharges than towards discounts, in spite of the economic equivalence. (See Table 6, infra.) Accordingly,

60. S. REP. NO. 97-23, at 3-4.
63. Hanson and Kysar, supra note 62, at 1441.
64. Framing biases first received widespread attention from the work of Amos Tversky and Daniel Kahneman. See supra note 61.
although the credit card lobby has never embraced cash discounts, it has preferred them to credit surcharges, because consumers perceive a discount as a gain, but a surcharge as a penalty and will prefer to use another payment system rather than be penalized for using credit.\textsuperscript{66}

**Table 6. Dutch Consumer Opinion on Surcharging and Discounting**

<table>
<thead>
<tr>
<th></th>
<th>Surcharging</th>
<th>Giving Discount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Bad</td>
<td>26%</td>
<td>19%</td>
</tr>
<tr>
<td>Bad</td>
<td>48%</td>
<td>30%</td>
</tr>
<tr>
<td>Neutral</td>
<td>15%</td>
<td>22%</td>
</tr>
<tr>
<td>Good</td>
<td>7%</td>
<td>19%</td>
</tr>
<tr>
<td>Very Good</td>
<td>0%</td>
<td>3%</td>
</tr>
<tr>
<td>Don’t Know</td>
<td>4%</td>
<td>7%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>


The Senate Banking Committee itself displayed the framing bias in its concern for the consumer penalized with a surcharge. Nonetheless, the Committee's concern about bait-and-switch pricing with surcharges seems misplaced. Comparing price *minimums*, not maximums, is actually the more effective way for consumers to gauge the price of a payment system.\textsuperscript{67} Accordingly, the choice of payment system should be a separate, bargained-for element in a sale.

When consumers compare price minimums, they perceive the cost of the underlying good itself plus the baseline cost using *any* method of payment. Surcharges then alert the consumer to the extra cost of different payment systems. A cash discount does not have the full signaling effect of a credit surcharge, which illustrates to the consumer the marginal cost of using credit. Indeed, the Chairman of the Federal Trade Commission, writing in opposition to the surcharge ban, recognized that surcharges, not discounts, drive home the true marginal cost of a credit transaction to the consumer:

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\textsuperscript{66} See supra note 62.

\textsuperscript{67} See Bar-Gill, supra note 28, at 1381; see also Barron et al., Working Paper, supra note 27, at 6.
In theory, a discount and a surcharge are equivalent concepts, but one is hidden in the cash price and the other is not. From a practical standpoint the surcharge seems easier to implement and more likely to ensure that the price credit card users pay reflect the cost of accepting credit cards.\textsuperscript{68}

Because of the framing effect, surcharges are far more effective than discounts at signaling to consumers the relative costs of a payment system. Another cognitive bias, the underestimation bias, amplifies these negative effects.

\textbf{B. The Underestimation Biases}

The underestimation bias refers to the tendency of people to underestimate future needs and abilities. Oren Bar-Gill has cogently noted that consumers display four separate underestimation biases in regard to payment systems: future borrowing, cost of future borrowing, contingencies bearing economic hardship, and underestimation of their forgetfulness.\textsuperscript{69} Consumers regularly underestimate their future borrowing and its costs, in part because interest rates on credit cards are disclosed far in advance of the actual borrowing.\textsuperscript{70} Consumers also underestimate their ability to repay debt because they do not properly account for the likelihood of contingencies that will limit their ability to repay.\textsuperscript{71} Finally, consumers simply do not properly account for the likelihood that they will forget to pay their bills and thus allow interest to accrue for another billing period.\textsuperscript{72} The mechanics of these underestimation biases need not particularly concern us here; rather it is enough to note that the net effect is that when a consumer acquires a line of credit, such as a credit card, the consumer is more likely to end up paying more interest on a higher balance than the consumer anticipated.

Thus, the framing bias means that surcharges rather than discounts are effective at signaling the relative costs of transactions by payment system to consumers. Underestimation biases mean that consumers are already predisposed to believing incorrectly that they will be able to pay off credit card balances before the balances start accruing interest. This means that any overuse of credit cards relative to other payment systems is magnified in dollar terms by the propensity of consumers to use the borrowing function of credit cards more than intended.

\textsuperscript{68} S. REP. NO. 97-23, at 11-12 (1981).
\textsuperscript{69} See Bar-Gill, supra note 28.
\textsuperscript{70} Id. at 1395-401. Query whether consumers even read the TILA disclosures, much less understand them, and whether one can know one's actual interest rate on a credit card with cross-default clauses.
\textsuperscript{71} Id. at 1400.
\textsuperscript{72} Id. at 1400-01.
V. THE COSTS OF NO-SURCHARGE RULES AS VIEWED FROM THE 1980s

The legal and behavioral constraints on merchants' pricing result in inadequate cost signaling to consumers, who therefore overuse the more expensive payment system—credit. Overconsumption of credit has several deleterious effects on the entire economy. Overconsumption of credit can exert inflationary pressure on the economy as it expands the pool of money available for purchasing, but it also raises prices because of the higher cost to merchants of credit transactions. Overconsumption of credit can lead to lower rates of savings and is a major factor in the rising rate of consumer bankruptcy. Moreover, allowing pricing constraints equalizes costs to consumers between payment systems, which results in the subsidization of credit consumers by non-credit consumers. This in turn drives more consumers to credit purchases, thus resulting in an effective subsidy for the credit card industry. The Cash Discount Act was a deal cut by powerful insiders that has since cost every American just a little bit of skin—and earned a fortune for credit card companies.

These concerns were noted by the critics of the Cash Discount Act, foremost among whom was Senator William Proxmire (D-Wisc.), famed for creating the “Golden Fleece” Awards to draw attention to government waste. Senator Proxmire declaimed the Cash Discount Act’s encouragement of credit purchases through the surcharge ban. He saw the overuse of credit as having an inflationary effect on the economy and constituting a major subsidization of the credit card industry. “Make no mistake about it,” Senator Proxmire declared, “the heart and soul of this legislation is the demand of the credit card industry that the Congress extend the ban on credit card surcharges for another three years.” Senator Proxmire also noted that the real forced subsidization was of

73. See MANNING, supra note 29.
74. See SULLIVAN, WARREN & WESTBROOK, supra note 30. The relationship between credit card debt and bankruptcy has been questioned by Judge Edith Hollan Jones and Todd J. Zywicki. See Edith H. Jones & Todd J. Zywicki, It’s Time for Means-Testing, 1999 BYU L. REV. 177, 224-28; Zywicki, supra note 21, at 81-83. Ronald J. Mann has cogently argued, however, that there is a statistically significant correlation between increases in consumer credit card debt and bankruptcy filings a year later. See Ronald J. Mann, Credit Cards, Consumer Credit, and Bankruptcy 23 (Univ. of Texas Sch. of Law, Law and Econ., Working Paper No. 044, Mar. 7, 2005), available at http://www.ssrn.com/abstract=690701.
76. The Committee Report acknowledged that there had been testimony that surcharge and discount restrictions force cash consumers to subsidize the costs of credit consumers and lead to an overuse of credit cards, which has inflationary effect on the economy, but did not think there was sufficient evidence to act. See S. REP. NO. 97-23, at 4 (1981). Instead, the Act instructed the Federal Reserve Board to prepare a report on these issues. See Cash Discount Act, Pub. L. No. 97-25, § 202, 95 Stat. 144 (1981); see also CREDIT CARDS IN THE U.S. ECONOMY, supra note 50.
78. Id. at 8.
credit card companies by cash consumers, not by credit card consumers, because subsidized credit meant more use of credit cards. He further noted the market inefficiencies created when the cost of credit is masked:

The ban on surcharges also promotes costly economic inefficiencies by encouraging Americans to use credit cards without knowing the true cost of the credit card. Unquestionably, the free market system depends on consumers being able to make informed choices. It is therefore vital to the market place that the Congress not be a party to any plan to restrict free enterprise in order to enable the credit card industry to bury billions of dollars in hidden charges. Consumers must be free to choose wisely between buying on credit and using cash. By the same token, merchants must also be free to choose whether discounts or surcharges are in their best interest.

VI. NEW REASONS FOR CONCERN ABOUT NO-SURCHARGE RULES

While Congress focused on whether to permit surcharges and discounts themselves, it did not address whether to restrict private bans on them as against public policy. Senator Proxmire’s logic, though, applies with equal force to private restraints on trade as to governmental ones and still holds true today, even after the surcharge ban provision of the Cash Discount Act lapsed in 1984.

Inflation is no longer the specter haunting the national economy, but the rise of consumer debt and consumer bankruptcy filings present a new impetus to reexamine no-surcharge rules and their influence on consumer payment system choices, especially as new, electronic payment systems, particularly PIN-based, on-line debit cards, offer many of the convenience and security benefits of a credit card at as little as one-sixth the cost. As debit cards have gained widespread use in the national economy, no-surcharge rules now present an anti-competitive stumbling-block limiting the use of debit cards and efficient use of payment systems in the United States.

Internationally, too, there has been movement to eliminate no-surcharge rules, as part of a general reevaluation of credit card network interchange rates, honor-all-card rules, net issuer, and no-surcharge rules. The United Kingdom’s Office of Fair Trading recently determined that MasterCard’s interchange structure was anti-competitive. Interchange fees are currently being reviewed in Poland, Spain, New Zealand, Portugal, Mexico, Colombia, South Africa, and Switzerland. The European Community declined to take

79. Id. at 8-9.
80. Id. at 9 (emphasis added).
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action against Visa's no-surcharge rule, but five European countries have individually banned no-surcharge rules, and MasterCard has recently voluntarily rescinded its no-surcharge rule for Europe. In 2003, Australia banned no-surcharge rules, and Mexico is currently considering proposals to do the same. As an array of electronic payment systems come into their own, the time is now ripe for a reconsideration of no-surcharge rules in the United States.

VII. THE CURRENT LEGAL BACKGROUND

Today, federal law no longer bans credit surcharges but continues to prohibit state and private restrictions on cash discounts, while permitting state and private restrictions on credit surcharges, in spite of their economic equivalence. Allowing the federal credit surcharge ban to lapse was only a partial correction to an unnecessary economic restraint, as state and private law still restricts credit surcharges. Ten states prohibit most surcharges on the use of credit, while Minnesota caps surcharges at an arbitrary five percent. More


85. Finland, the Netherlands, Portugal, and Sweden ban surcharge restrictions for credit and debit cards. NILSON REPORT, Issue 819, at 1, 6 (Sept. 2004). The UK bans surcharge restrictions for credit cards but not debit cards. Weiner & Wright, supra note 81, at 19, 23.

86. MasterCard rescinded without comment its no-surcharge rule for all of Europe effective as of January 1, 2005, but has retained the rule for other regions. MASTERCARD BYLAWS AND RULES, Rule 18.A.2.3 (Oct. 2004); NILSON REPORT, Issue 819, at 6 (Sept. 2004).


88. Weiner & Wright, supra note 81, at 28.


90. It is unclear whether these restrictions can constitutionally apply to interstate credit card transactions. My research has not uncovered any court or state agency opinion letter that addresses whether these restrictions apply only to merchants physically conducting business in the state or also to merchants who do business electronically or telephonically with residents of the state. Indeed, given the role of credit in interstate commercial transactions, one wonders why there is not either federal law or uniform state law that addresses credit surcharges and cash discounts. This hardly seems to be the place to experiment in the laboratory of federalism, as the vast scale of interstate commerce effectively taints any state by state experiment.

91. CAL. CIV. CODE § 1748.1(a) (Deering 2004); COLO. REV. STAT. § 5-2-212(1) (2004); CONN. GEN. STAT. § 42-133ff(a) (2003); FLA. STAT. § 501.0117 (2004); KAN. STAT. ANN. § 16a-2-403 (2003); MASS. GEN. LAWS ch. 140D, § 8-103.1.E, § 8-303.2 (2003); N.Y. GEN. BUS. LAW § 518 (2004); OKLA. STAT. tit. 14A, § 2-417 (2004); TEX. FIN. CODE ANN. § 339.001 (2004); see Kitch, supra note 36, at 229 n.23 (for history of state surcharge prohibitions until 1990).

92. MINN. STAT. § 325G.051 (2003). Nothing in federal law prohibits states, as opposed to card issuers, from restricting cash discounts, but no states have such restrictions. Five states specifically allow sellers to offer discounts. See CAL. CIV. CODE § 1748.1(a) (Deering 2004); COLO. REV. STAT. § 5-2-212(2) (2004); CONN. GEN. STAT. § 42-133ff(c) (2003); FLA. STAT. § 501.0117 (2004); ME. REV. STAT. ANN. tit. 9, § 8-103.1.E. California, Maine, and Washington also duplicate federal provisions banning card companies from restricting discounts. See CAL. CIV. CODE § 1748 (Deering 2004); Me.

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importantly, private contractual agreements between card issuers and sellers restrict most surcharges. Private no-surcharge rules typically prohibit merchants from charging more for a credit transaction than for a non-credit transaction.\textsuperscript{93} They also prohibit merchants from charging different prices between cards or card brands.\textsuperscript{94} Indeed, no-surcharge rules effectively prevent consumers from distinguishing between brands based on cost, thus protecting the credit card industry from internal price-wars.\textsuperscript{95} Even if cash discounting effectively signaled the cost of payment systems to consumers, it would not help them differentiate costs between credit cards. Only a free pricing regime, in which merchants can charge for payment systems in relation to their cost would signal the full transaction costs to consumers and give them the information necessary for making efficient payment consumption decisions.

VIII. THE FUNCTIONS OF NO-SURCHARGE RULES

Why do credit card networks have no-surcharge rules? The reasons depend on the type of card network. Not all card networks have them. Open network cards such as MasterCard\textsuperscript{96} and Visa\textsuperscript{97} have no-surcharge rules, as does


\textsuperscript{94} Id.

\textsuperscript{95} Frankel, \textit{supra} note 25, at 345.

\textsuperscript{96} MASTERCARD INTERNATIONAL, MERCHANT RULES MANUAL, BYLAW 9.12.2 (July 2004), at 44 (Apr. 2004), available at http://www.mastercardmerchant.com/docs/accept_mastercard/merchant_rules.pdf. ("A merchant must not directly or indirectly require any MasterCard cardholder to pay a surcharge or any part of any merchant discount or any contemporaneous finance charge in connection with a MasterCard card
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Discover, a closed network card. American Express, however, a closed network card does not, although it requires its card to be treated the same as other cards, which effectively imposes a no-surcharge rule if any of the other cards are accepted.

A. Masking the Price of Credit Card Transactions

Credit card networks use no-surcharge rules to leverage their market power by forcing more card transactions than is efficient. Open and closed card networks accomplish this in different ways. Open networks, for instance, use surcharge restrictions in combination with interchange fees to increase credit card usage by making credit relatively cheaper to other payment systems to the extent of the interchange rate. When issuers charge acquirers higher interchange rates against the background of surcharge restrictions, the acquirers will pass this increase on to the merchant in the form of a higher discount rate. The merchant will then absorb some of the increased cost of credit transaction. A merchant may provide a discount to its customers for cash payments. A merchant is permitted to charge a fee (such as a bona fide commission, postage, expedited service or convenience fees, and the like) if the fee is imposed on all like transactions regardless of the form of payment used. A surcharge is any fee charged in connection with a MasterCard transaction that is not charged if another payment method is used.

98. VISA, MERCHANT SERVICES MANUAL 37, available at http://www.moneris.com/downloads/manuals/visamanual_eng.pdf. (“Can I charge my customer a fee for using their Visa card or INTERAC debit card? No. You cannot charge a fee (surcharge) for card use. Regardless of the types of products you sell, it is against your merchant agreement to charge any customer any fee for making a purchase with their credit or debit card.”).

99. AMERICAN EXPRESS, TERMS AND CONDITIONS FOR AMERICAN EXPRESS CARD ACCEPTANCE (revised Jan. 2001) (“You agree to treat Cardmembers wishing to use the Card the same as you would treat all other customers seeking to use other charge, credit, debit or smart cards or similar cards, services or payment products. You agree not to impose any special restrictions or conditions on the use or acceptance of the Card that are not imposed equally on the use or acceptance of other cards.”). It is possible that American Express is prohibited from having an explicit no-surcharge rule by the terms of its settlement with the Consumers Union. See Kitch, supra note 36.

100. Frankel, supra note 25, at 343.

101. For excellent illustrations of credit card payment systems, see Hunt, supra note 93, at Figure
transactions through reduced profits and pass some of it on to consumers through increased prices, which no-surcharge rules force to be applied to all means of payment. This increases the relative price of non-credit payment systems vis-à-vis credit, which leads to increased credit card usage, both in percentage and in absolute terms.

Not only will consumers shift more of their purchases to credit, but they will also make more purchases because they feel less constrained in credit spending than they do when spending cash on hand. An MIT study found that when Sloan School of Management MBA students, a financially savvy subject group, bid on sporting events tickets using either cash or credit, they were willing to place bids up to 64% higher when bidding with credit than with cash. While this disparity seems so large as to appear anomalous, the general pattern of credit bids being at statistically significant higher levels than cash bids was confirmed by other studies. Credit cards distort consumers' cost-benefit analysis and increase consumers' willingness to pay for goods and to make purchases they otherwise would not. When purchasing with credit cards, consumers will pay more to get the same goods and services or pay more to acquire goods and services of marginal value to them. No-surcharge rules increase the use of credit cards for transactions and the amount of transactions, adding to credit card profits on the front end via interchange and discount fees. The underestimation biases discussed above then amplify this higher transaction volume to create even more backend profits via interest. The greater the number of consumers using credit cards, the greater the number of consumers likely to revolve their account balances and to pay high interest rates and fees. Interchange fees thus help funnel consumer payments to credit cards from other payment systems.

B. Masking Cost Differences Between Card Brands

Closed networks do not have interchange fees, so surcharge restrictions are of little importance to them in terms of increasing use of their particular card. Nevertheless, they benefit from surcharge restrictions in the general increase in credit card usage, both in absolute terms and as a percentage of consumers' payments, to the extent that consumers see all credit card brands and issuers as interchangeable. No-surcharge rules protect precisely the perception of


102. Frankel, supra note 25, at 343.
103. Prelec & Simester, supra note 28, at 11.
104. Id.
105. Id.
106. See supra text accompanying note 95.
interchangeability, especially for those consumers who pay their cards in full and on time. (Those who do not pay in full and on time are probably less likely to pay attention to comparative interest rates and fees between cards.) Because merchants are forbidden from pricing differently among credit cards, transactions made with cards with higher discount rates, like American Express, are still priced the same as those made with cards with lower discount rates. Indeed, even for the same credit card brand, such as Visa, the point-of-sale price on a purchase made using a premium card (a card that offers rewards points of some sort) from one issuer is the same as the point-of-sale price on the same purchase made using a regular card from another issuer. No-surcharge rules thus also insulate the credit card industry from internal rate competition.

C. Limiting Pricing Range in the Acquirer Market

No-surcharge rules also limit the competitiveness of the credit card acquirer market. The credit card acquirer market is one that often escapes notice because it is a business-2-business market; consumers (and hence scholars) tend to have little exposure to the card acquisition business. Not surprisingly, the debate about the competitiveness of the credit card industry has largely focused on credit card issuers, not acquirers. For example, Todd J. Zywicki has argued that the credit card industry is competitive, based largely on the low cost of entry to becoming a credit card issuer. Zywicki argues a binary proposition that a credit card network is either competitive or not. The mistake he makes, however, is in treating the credit card market as being solely the issuer market. Because credit cards function as part of a network economy, the acquisition market must also be considered.

While a full analysis of the competitiveness of the acquisition market is beyond the scope of this article, the high level of market concentration supports an initial impression of a less competitive market. The First Data Corporation alone has a 51% share of the credit card acquisitions market, followed by Bank of America at 17%. The range in which acquirers can compete is constrained by the interchange rates set by the card networks. Thus, acquirers can only compete on price within a limited range. It is questionable, then, whether merchants are sensitive to the limited marginal price differences between acquirers, above and beyond the interchange rate. If merchants are not

108. See Zywicki, supra note 21, at 81, 129.
109. See id. at 111.
110. See id. at 137-38.
particularly sensitive to this difference, it is not likely that price competition is a major factor in the acquisitions market. Recent antitrust litigation over interchange rates initiated by merchants, or by the plaintiffs' bar, shows that there is at least some price sensitivity on the part of merchants.\textsuperscript{112}

The cost of entry in becoming a credit card network is staggering high, and two networks, Visa and MasterCard control over 75\% of the market\textsuperscript{113} and have a 95\% overlap in membership.\textsuperscript{114} The interchange rate set by the network is the major component of the discount rate. If the interchange rate is 1.5\%, it sets the minimum discount rate for which acquirers can still earn a profit. As a result of no-surcharge rules, the networks are not really competing based on pricing. Thus, while acquirer competition may affect the upper limit of discount rates, it is unlikely to impact the lower range of merchant discount rates, which means that the downward pressure on prices of acquirer competition is blunted. Because credit cards operate in the circuit of a network economy, a non-competitive acquirer market inevitably affects the issuer market and vice-versa. Competition among issuers alone is not dispositive of a competitive industry.

\textbf{D. Honey for Flies: Shifting the Basis of Competition From Price to Bundled Benefits}

Whether or not the industry as a whole is competitive might well be a secondary concern, however, to the way in which the industry does compete. Zywicki has correctly observed that credit card issuers do not really compete on interest rates.\textsuperscript{115} In part this is because consumers are largely indifferent to interest rates.\textsuperscript{116} Indeed, given the prevalence of complex cross-default clauses, it is virtually impossible to know what the true interest rates on a credit card are. Instead, credit card issuers compete on a variety of bundled products, particularly affinity programs like frequent flyer miles.\textsuperscript{117} Calculating the

\textsuperscript{112} See infra Part XIX.
\textsuperscript{114} See In re Visa Check/MasterMoney Antitrust Litig., 280 F.3d 124, 129 (2d Cir. 2001).
\textsuperscript{115} See Zywicki, supra note 21, at 104-09. Zywicki argues, however, that credit card users who have large revolving balances do shop around based on interest rates. While they may be able to compare APRs in TILA disclosure schedules, consumers are simply unable to calculate the actual cost of credit because defaults are often linked to defaults or even late payments of other lines of credit or bills through so-called "cross-default" clauses; see also Christine Chandran et al., Competition in the New Zealand Credit Card Market from the Consumer Perspective, 6 J. ASIA-PAC. BUS. 59 (2005), available at http://centre-banking-studies.massey.ac.nz/research_outputs/CreditCardCompetitionUpdate.pdf.
\textsuperscript{116} See Chandran et al., supra note 115, at 63; see also Peter Pae, Credit Card Rates Keep Rising Despite the Competition, WALL ST. J., Sept. 6, 1991, at B1.
\textsuperscript{117} See Press Release, Vertis, Bonus Points and Other Incentives Attract Consumers to Credit Cards (July 20, 2005), http://biz.yahoo.com/bw/050720/205200.html?v=1 ("Obtaining Points and Getting Money Back Are Most Appealing Reasons to Select a Credit Card").
bundled pricing of credit and affinity programs would involve a formula far too complex for any consumer to calculate. Therefore, consumers cannot rationally choose between credit cards based on total cost; instead, they choose based on perceived benefit.

Competition between credit card issuers is not on the basis of interest rates but on the basis of affinity programs and other bundled services.\textsuperscript{118} Hence, American Express, which is less desirable as a card because it is accepted by fewer merchants than MasterCard or Visa due to its higher discount rates, offers better mileage deals to cardholders in order to stay competitive. Similarly, the largely defunct Diners Club Card is attempting to push its way back into the market by offering better frequent flyer mile terms than other cards.\textsuperscript{119} Consumers pay attention to bundled intangibles such as frequent flyer miles; a 2002 survey found that half of consumers with rewards cards said that the rewards points influenced their decision to use the credit card instead of another payment method.\textsuperscript{120}

The economics of frequent flyer miles demonstrate that they are used for the same effect as the no-surchARGE rule—in order to increase the volume of card users and card usage. Credit cards offer consumers frequent flyer miles at a cost far beneath retail in order to encourage card usage. It is possible to purchase frequent flyer miles directly from the airlines over their websites. Mileage cost varies but is usually in the range of 3 to 4¢ per mile.\textsuperscript{121} For a card that offers the cardholder the typical arrangement of one frequent flyer mile per dollar spent the bundling of the miles with the card is efficient for the consumer if the retail cost of the miles (R) is greater than or equal to the cost of the miles with the card (C) times the merchant discount rate (D) times the percentage of the discount rate that the merchant would not charge to consumer if two-tiered pricing were available (that is, the consumer’s savings relative to the discount rate in a two-tiered system) (P). Expressed as an equation, bundling is efficient for the consumer if R≥CDP.

Accordingly, a $100 purchase on a mile/dollar card earns 100 miles. At 4¢/mile on American Airlines, these same miles could have been purchased for $4.\textsuperscript{122} Of the $100 charged on the card, say 1.86% or $1.86 is the discount rate, of which $1 goes back to the issuing bank. If the issuing bank had bought miles in the retail market, it would have lost $3 on the transaction. Unless the issuing

\textsuperscript{118} See Bar-Gill, supra note 28, at 1376–77.


\textsuperscript{121} See American Airlines, Buy AA Miles, https://buyaamiles.points.com/BMAccount.jsp. Other airlines offer miles somewhat cheaper with high volume discounts, but usually in the range of 2.75¢ to 5¢/mile.

\textsuperscript{122} See id.
bank gets an unusually favorable wholesale rate (a 75% discount or greater!), it would lose money on the transaction based upon very conservative numerical assumptions. Efficiency only increases as card users earn miles on the sales tax that they pay on underlying purchases, whereas retail mileage purchasers often have to pay sales tax, which would increase R. Moreover, many cards offer more than one mile per dollar charged, decreasing C.

In other words, from the consumer's perspective, frequent flyer mile programs seem to present an amazingly efficient bundling of products. Consumers can earn miles via their charge card much more cheaply than they can via direct purchase from the airlines. Conversely, when consumers are forced to internalize the costs of credit card purchases, as they do when they are charged a 2.49% "convenience fee" for paying federal income taxes via credit card through the IRS's two official card processing companies, the cost of the convenience fee vastly outweights rewards point benefits to consumers. The card issuers gain valuable information, such as customer lists, from their relationships with airlines, which offsets at least some of the cost of the miles to the issuers. Otherwise, unless the retail market in frequent flyer miles is incredibly inefficient, the economics of credit card frequent flyer mile programs are only possible if card issuers are subsidizing the price of the miles or getting an unbelievable wholesale bargain from the airlines, which hope to increase volume and brand loyalty.

Apart from the value of information obtained from affinity partners, frequent flyer mile programs appear to be certain losses. But direct profit-maximization is not their function; instead they increase card issuers' profits indirectly. Affinity programs like frequent flyer miles and cash-back rebates have the effect of reducing the cost of credit transactions. A consumer who purchases goods using cash for the same sticker price as a consumer who purchases the good with a cash-back rebate card will have paid more in net terms for the good. Similarly bundling of products like frequent flyer miles at far better prices than at retail prices only increases the attractiveness of credit transactions. Frequent flyer and cash-back programs are the honey that draws in the flies—increased card usage and transaction volume mean that there is more grist for the interest and penalty fee mill, increasing profit levels even if the profit margin might be lower.

Interest rates are not the basis of credit card company competition—they are the goal of credit card company competition. The law of large numbers says that an increase in the number of users of an issuer's credit card will result in an

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increase in the number of people paying interest and fees, and that the higher the volume of transactions charged to cards, the more likely it is that there will be yet further interest and fees because of the way in which credit cards reduce spending constraints. Credit card companies will take a hit on frequent flyer miles in order to have more people paying interest that will be compounding on a larger principal.

IX. EXISTING SCHOLARSHIP ON NO-SURCHARGE RULES

There is only a small body of scholarly literature on no-surcharge rules and their brethren, interchange fees. This literature is generally quite recent and has been written entirely by economists, who have only considered the direct microeconomic impacts of no-surcharge rules and who treat them as a quaint twist in the fascinating intricacies of network economies. No attempt has been made to connect no-surcharge rules to larger macroeconomic and social concerns or to approach no-surcharge rules from a legal, as opposed to purely economic, standpoint.

Most of the existing scholarly analysis of no-surcharge rules has been wrongly focused on the need to protect and foster credit card networks and has paid scant attention to the impact on merchants and consumers. Accordingly, these analyses have been marred by their initial assumption that more credit consumption is inherently efficient. These analyses have questioned whether banning no-surcharge rules would actually lead to optimal levels of credit usage. Economists David S. Evans and Richard Schmalensee have argued that unless there is perfect competition, abolishing no-surcharge rules does not lead to an efficient outcome because "... imperfect competition among issuers then tends to lead to under-provision of card services, and merchants could use surcharges as a mechanism for price discrimination."

Evans and Schmalensee's scenario of the under-provision of card-services seems quite unlikely. First, the abolition of the no-surcharge rules would spur increased competition among issuers. Currently no-surcharge rules shield issuers from competition with each other, as noted above. Greater competition in the card market should lower prices, which would ideally result in an increased supply of card services to meet the increased demand on account of the lower prices. Moreover, if competition resulted in fewer card issuances, this would not be an under-provision but an optimal free market level. Second, the costs of obtaining a credit card are negligible, and there are

124. See Prelec & Simester, supra note 28, at 11.
126. Id. at 28.
127. See supra Part VIII.B.
virtually no costs to holding (as opposed to using) a no-annual fee card. Given the barrage of "pre-approved" offers for no-annual fee credit cards that assails most of America, regardless of, or perhaps in an inverse relationship to, credit-worthiness, it is unlikely that anyone who wants a credit card will not have one. Evans and Schmalensee conflate the demand for a line of credit with demand for use of the line of credit. There is no indication that consumer demand for revolving lines of credit will decrease, as a result of abolishing no-surcharge rules. Consumers would still like to have the liquidity cushion offered by credit cards. Consumers might draw down on their line of credit more sparingly, however, as they would make payment decisions based on both cost and benefit, which should lead to optimal levels of credit card usage.

Evans and Schmalensee's concern about merchant price discrimination is echoed throughout the economic literature on no-surcharge rules. Indeed, it seems to be the primary justification for such rules, which are known as "no discrimination rules" in Europe. Thus, economists Joshua S. Gans and Stephen P. King have worried that "In the absen[c]e of a no surcharge rule, a merchant with market power will engage in price discrimination" by pricing higher for credit purchases than for non-credit purchases. This is a very odd characterization of the basic proposition that unless constrained by some artificial restraint, a merchant will charge according to the cost of a service. Indeed, such "price discrimination" is exactly what should happen in a free payments market and will lead to efficient consumer use of payment methods by making consumers internalize the costs of payment systems. If excessive price discrimination does occur, it can be legally remedied by limiting the surcharge to the additional cost of the credit transaction. In other words, Gans and King have the system completely backwards when they claim that, "[u]nder the no-surcharge rule, the customer chooses the level of credit card transactions according to their own marginal costs and benefits." Consumers only consider benefits in a no-surcharge system.

Other economists who have considered the issue of no-surcharge rules reached similarly inverted conclusions, in part because many have proceeded with the assumption that maximizing the size of a credit card network is the efficient outcome, rather than asking what is the efficient level of usage of different payment systems. Thus, economist Julian Wright has fretted that, "In the case where merchants have local monopolies but are free to surcharge, we show they will do so excessively, so as to extract surplus from inframarginal

129. Id. at 16.
cardholders. The result will be too few cardholders and too little card usage.\textsuperscript{131} In other words, the concern is of merchants discriminating on price as monopolists against the consumer.

The concern for victimized credit card companies is both amusing and astounding. The problem of cardholders getting squeezed by merchants is largely fictional in a world where consumers can choose between several payment systems. A merchant who is able to extract a monopoly price is unlikely to do so only for transactions made with a particular payment system. Therefore, monopoly pricing would affect all consumers and is unlikely to have a disparate impact on credit consumers. Moreover, when merchants accept several types of payment, consumers are not forced to make credit card transactions; alternatively, when merchants only accept credit cards, then there is no surcharge per se, only a higher base price. Indeed, the true threat from monopoly pricing is from the credit card networks, not merchants. Merchants can discriminate more effectively against credit cards simply by not accepting the cards; there is no need to resort to surcharges. A credit card network is less harmed by a merchant who charges a monopoly-priced surcharge, thus reducing marginal card use, than it is by a merchant who does not accept cards at all, thus eliminating all card use.

The justification of no-surcharge rules as a network defense against monopolistic behavior by local merchants is akin to arguing that two wrongs make a right, that one anti-competitive behavior justifies another. This calculus ignores the net positive effects of no-surcharge rules for credit card networks and the negative effects on third parties. Moreover, it frames the existence of the networks as a social good itself; such an assumption puts the cart before the horse. As detailed above, no-surcharge rules have far more benefits for credit card networks than simply off-setting potential monopoly pricing by merchants. No-surcharge rules also impose significant costs on third parties—consumers. Thus as a remedy against anti-competitive behavior, no-surcharge rules are overbroad; to justify them as a protection against merchant’s anti-competitive behavior is farfetched, especially as there are adequate legal remedies available for credit card networks. If merchants are truly acting in an anti-competitive manner, the card networks or the government can always bring an antitrust action. Antitrust action by the card networks would not be any more expensive than a no-surcharge rule, as the rule is only valuable to the extent that the card networks enforce it or merchants believe that it will be enforced.

A further problem in much of the existing scholarship on no-surcharge rules is the assumption of rational, efficiency-maximizing actors. In a world in which consumers (and merchants) are not indifferent to the bottle half-full and the

bottle half-empty, the irrational distinction between surcharges and discounts is tremendous. Moreover, merchants' acceptance of credit cards is not solely for transactional benefits, but because they believe that card acceptance will increase the volume and size of purchases. There is a major disconnect between the sophisticated economic modeling based on the assumption of rational consumers and merchants and the reality of their behavior. Thus, Robert M. Hunt has argued that permitting merchant surcharges will blunt the effect of raised interchange fees by credit card networks to stimulate credit card usage.

In the scenario laid out by Hunt, when an open payment system network, like MasterCard or Visa raises interchange fees, the additional revenue can be passed on to the cardholders via lower fees, interest rates, or affinity program perks such as frequent flyer miles, thus making card use more attractive. Acquirer banks will likely pass the higher interchange fee on to merchants in the form of higher discount rates or fees. If the merchant were then to pass these costs on to the consumer in the form of a credit surcharge, it would dull the effects of the issuer's reduction in fees and offers of perks. Hunt sees this as resulting in an underutilization of payment cards. This concern seems misplaced. The scenario laid out by Hunt only results in cardholders being forced to internalize the costs of the payment system. Cost internalization is precisely the result that we should want and that private and state law is currently preventing.

The net effect of the constellation of public and private law is to permit sellers to offer cash discounts but to forbid surcharges for credit purchases and forbid credit purchases being priced differently from any non-cash purchases. Private agreements, state, and federal law, when combined with

132. Id. at 4.
133. See infra Parts XV and XVII.B.
135. See Hunt, supra note 93, at 9; cf. Sujit Chakravorti & William R. Emmons, Who Pays for Credit Cards?, 1 FED. RES. BANK OF CHI. EMERGING PAYMENTS OCCASIONAL PAPER SERIES 2 (2001) (arguing that credit card companies need affinity programs to keep convenience, float-only users from defecting to merchants who do not accept credit cards and accordingly are able to price lower).
136. See Hunt, supra note 93, at 9.
137. See id.
138. Hunt does mention the possibility that surcharges would be too high because merchants might equate credit card usage with a higher willingness to pay (it is borrowed money, after all). Id. at 9 n.20.
139. See, e.g., supra notes 94-99. State law is generally vague on whether it allows for different pricing between credit and debit cards. Only Connecticut's surcharge restriction statute is drafted to clearly cover debit cards. See CONN. GEN. STAT. § 42-133ff(a) (2003). A more typical surcharge restriction statute: "No seller in any sales transaction may impose a surcharge on a cardholder who elects to use a credit card in lieu of payment by cash, check or similar means." See OKLA. STAT. tit. 14A, § 2-417 (2004). My research has not uncovered any reported cases or agency opinion letter from any state
the framing bias impede merchants from effectively signaling the cost of payment system choice to consumers. Surcharge restrictions create a range of problems for the entire economy by leading to an over-consumption of credit: inflation; decreased consumer purchasing power because of greater debt service; lower savings rates; more consumer bankruptcies; subsidization of credit consumers by non-credit consumers; and subsidization of the entire credit card industry. These concerns, many of which were noted in the Senate debate on the Cash Discount Act, still apply with equal force to state and private surcharge restrictions.

X. COMPARATIVE COSTS OF PAYMENT SYSTEMS

Precise comparisons of the costs of different payment systems to merchants are difficult for a number of reasons. In general, there is little information on the costs of payment systems. Moreover, costs change from year to year as new technologies are developed and new efficiencies are discovered. The costs come from a number of different parties—clearinghouses, brands, issuers, merchants’ banks, and gateway operators, among others. While some costs involved relate to percentage sale price, some are flat per transaction fees, some are flat monthly fees, and some are initial set-up costs. Accordingly, costs vary with the size and volume of transactions. Moreover, the costs of debit and credit transactions vary among card issuer, brand (for instance, American Express generally has higher fees than MasterCard or Visa), and pricing plan within brand, and card issuers do not charge the same transaction fees to all merchants.

The largest fee involved for credit card transactions and off-line debit transactions is the “merchant’s discount rate,” a percentage of sales fee that the acquirer bank charges the merchant. Thus, the amount the acquirer bank credits a merchant on a credit card transaction is the sale price minus the merchant’s discount rate. The discount rate varies significantly between card brands and

dealing with whether the commonly used phrase “or similar means” covers debit card purchases. While debit cards have an economic function closer to cash or check (indeed, Visa calls its off-line debit card a “Visa check card”), they also involve acceptance costs to the seller that are more akin to credit cards than to cash or check.


141. See David B. Humphrey et al., Realizing the Gains from Electronic Payments: Costs, Pricing, and Payment Choice, 33 J. MONEY, CREDIT & BANKING 216, 220 (2001); see also Mann, Credit Cards, Consumer Credit, and Bankruptcy, supra note 74.

banks and also depends on the merchant’s credit risk, but it is usually in a range of 1.5% to 5% of sale’s price. The average discount rate for American Express last year was 2.4%, and Visa and MasterCard averaged 1.86%. The discount rate will always be greater than the interchange rate, so that the acquirer bank can make a profit on the transaction once it pays the interchange fee to the network.

In spite of the difficulty in assessing the costs of payment systems, there are data that compare costs per transaction. (See Tables 3-5, supra, and Tables 7-9 and accompanying graphs in the Appendix.) While the data sets are not particularly consistent in absolute values, they all show the same pattern: credit cards are by far the most expensive form of payment for a merchant, followed by off-line (signature) debit cards. On-line (PIN) debit cards are cheaper yet, but checks are still the cheapest form of tender for merchants to accept other than cash. (See Chart 1, infra.) In spite of this, consumers generally pay the same price per transaction, regardless of payment system.

143. See InfoMerchant, supra note 142; Kitch, supra note 36, at 219 (noting that discount rates “were once as high as seven percent; they are now often below two percent.”). Interestingly, some credit cards now also charge cardholders specific transaction fees for certain types of goods/services such as gambling and wire transfers. Given the way addictive behaviors have begun to be targeted by credit card companies, one wonders how long it will be before there are special surcharges for purchases of alcohol, tobacco, and pornography.

144. See Bounds, supra note 134, at B1.

145. The most comprehensive study appears to be one of the costs of payment systems for supermarkets conducted by PricewaterhouseCoopers for the Food Marketing Institute. The study found that “[t]he costliest transactions involve credit and off-line debit cards in which the purchase amount is not immediately deducted from the customer’s bank account.” Food Marketing Institute, News Release (Feb. 9, 2001), http://www.fmi.org/media/mediatext.cfm?id=289.

The difference between off-line and on-line debit can be confusing, as many debit cards work as both on-line and off-line cards. Off-line debit transactions involve the customer’s signature, much like a credit card, while on-line debit transactions use a PIN for security verification. On-line debit transactions are significantly faster for consumers than off-line transactions. See Food Marketing Institute, Should I Press Debit or Credit? It Does Make a Difference, A Consumer Brochure (2004), http://fmi.org/elect_pay_sys/FMI_debit.credit.pdf. Off-line debit transactions involve a discount rate kickback as well as a fixed fee, while on-line transactions only involve a flat monthly fee to the merchant. Many banks have begun charging a per-transaction fee for on-line debit purchases to consumers, billed after the purchase, which has caused both consumer and retail groups to complain to the Federal Reserve Board about lack of disclosure. See, e.g., Susan Reda, Duking It Out: Merchants and Bankers Spar over Debit Card Fees, STORES (Sept. 2004), available at www.stores.org/archives/2004/09/cover.asp (National Retail Federation files complaint with Federal Reserve Board).

Off-line debit purchases are an area of particular concern to low margin retailers. “The typical credit or off-line debit card transaction costs grocers 72 cents, according to the study. This figure is at least twice as high as payments by check (36 cents), online debit cards (34 cents) and food stamp coupons (35 cents). Of that 72 cents, the study found that about 80 percent covers settlement costs, largely the transaction fees that financial institutions charge retailers,” and “[t]he fees can be as high as 1.2 percent of the transaction amount, which effectively wipes out the grocer’s profit.” Food Marketing Institute, Should I Press Debit or Credit?, supra note 145.

146. See infra Chart 1; Tables supra 3-5; infra Table 8, at Appendix.
XI. MERCHANT COST SPLITTING WITH CUSTOMERS

The consumer is not directly charged with any of the costs of a payment transaction. Indeed, the typical buyer is completely unaware that these costs exist, and even if the buyer is aware, she will never know what the costs total on any particular transaction, as she does not know the merchant’s “discount rate” and other fees. The merchant, however, does have access to the information and can know the cost of a transaction if he desires. If a merchant accepts credit cards, then he has but two options with the costs of payment. Either he can absorb the cost, thus reducing his profit margin, or he can pass it on to the buyer, in whole or in part. As the percentage of credit sales increases, so does pressure on the merchant to pass along some of the cost to the consumer. Passing on some or all of the cost to the buyer is not risk free for the merchant, as higher prices will decrease the number of sales, all things being equal.

In spite of this conundrum, most merchants accept credit cards, as cards also have benefits that typically outweigh the costs and lost sales for all but merchants with the smallest of profit margins. By accepting credit cards, the merchant is likely to benefit, according to Visa and MasterCard, from:
increased sales because "[c]onsumers spend more when they’re not constrained by cash on hand,"\textsuperscript{147} increased sales of higher-margin products and specialty items; increased business efficiency through production of less, but more accurate, business data; simplified accounting; improved tip compensation and employee retention; improved cash flow; and reduced labor costs; reduced risks of loss to theft, error, or counterfeit; improved security for employees because there is less cash on hand; automatic currency conversion to the merchant’s currency; and greater customer satisfaction because of increased payment options and improved speed of checkout.\textsuperscript{148} Indeed, merchants firmly believe that not accepting credit cards is not an option because they will lose business.\textsuperscript{149} Merchants also are able to substitute the credit risk of a customer with the credit risk of the credit card network. Unlike with a bounced check, if the customer does not pay his card issuer, the merchant is still paid. Accordingly, it is not surprising that merchants are happy to accept credit cards and to absorb some, if not the bulk, of the cost of credit transactions instead of passing it on entirely to consumers.\textsuperscript{150} While some merchants might simply price all goods to include the full cost of credit purchases, thus passing on the cost of credit transactions to both cash and credit consumers, cost splitting appears more likely the case, based on the limited relevant empirical data.\textsuperscript{151} Therefore, non-credit consumers typically end up bearing a part of the costs of credit transactions when a merchant offers unified pricing for all payment systems. Even with no-surcharge rules, most merchants perceive the benefits of accepting credit card transactions as outweighing its burdens.

XII. CONSUMERS’ CHOICE OF PAYMENT SYSTEM

It is hardly remarkable that the buyer ends up bearing some of the cost of conducting a credit transaction with the merchant. The buyer benefits from the time value of money in the credit extension (the “float”), the added cash-flow cushion, the convenience of having an easily transportable and readily accepted means of payment, the twenty to thirty day grace period in which to identify disputed charges while retaining the disputed funds, and significant legal protections.\textsuperscript{152} Credit consumption also allows consumers to spend beyond

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\textsuperscript{147} MasterCard, Accepting MasterCard, http://www.mastercardmerchant.com/accept_mastercard/benefits.html; see also Prelec & Simester, supra note 28, at 11.
\textsuperscript{149} See National Association of Credit Management E-News, Credit Card Fees Are an Increasing Concern to American Businesses (Nov. 1, 2005), http://www.nacm.org/enews/enews11-1-05/enews.html#2.
\textsuperscript{150} See infra Part XIII, Subsidization Level 1.
\textsuperscript{151} See infra Part XIII, Subsidization Level 1.
\textsuperscript{152} See supra note 20 for discussion of factors leading to increased credit card usage. Fraud/theft liability for consumers on credit cards is capped at $50 for purchases made within 100 miles or the same
what they currently have, which expands the purchasing power available in the economy, and the immediate access to a short-term credit extension provides some reassurance to consumers in emergencies.

In the case of a credit consumer who pays his bills in full and on time (a "deadbeat"), the time value of money extended is quite small.\textsuperscript{153} Even if the amount of credit extended is large, the credit is extended without interest for only a very short period, at most a month or so on any purchase. The value of the credit extension is particularly negligible for small dollar volume purchases. At gasoline stations, for example, where the dollar volume of transactions is typically small, one study has concluded that convenience, and not the time-value benefit of credit, is the greatest factor in the decision to make a credit purchase.\textsuperscript{154} Moreover, a credit float, albeit of a more limited duration, is also available in the United States for checks.\textsuperscript{155} The cash flow, convenience, and legal protection benefits are significant, however, even if many buyers are unaware of their extent. Many credit cards also offer affinity programs such as frequently flyer miles, rewards points redeemable for goods, or cash back, although these often come with higher interest rates or annual fees.\textsuperscript{156} In short, credit cards offer the buyer many benefits.

In a system where all payment methods cost the consumer the same, the consumer will use the one that offers him the most benefits. Quite frequently, this is credit cards. The problem, however, is that the buyer does not know the costs of payment, as distinct from the net cost of the underlying good or service purchased. Thus, the buyer cannot unbundle the underlying good and service from the method of payment and choose the most cost/benefit efficient payment system for him. The concealed cost of payment is not a legal issue of disclosure under the amended TILA. Disclosure through legal notices is of little value to consumers who rarely read, much less understand, TILA notices. Rather the issue is that consumers are choosing to use a payment system state as the cardholder. 15 U.S.C.A. § 1666i(a) (2004). Consumers have a $50 fraud/theft liability on debit transfers when the card issuer is notified within two business days of the consumer learning of the fraud/theft. Thereafter the consumer's liability limit jumps to $500. Electronic Fund Transfer Act of 1978, Pub. L. 95-630, § 1501, 92 Stat. 364 (1978), codified at 15 U.S.C. § 1693g (2004); Regulation E, 12 C.F. R. § 205.6(b). Most consumers do not know the details of legal protections of different payment systems, and credit protector programs offered by many credit cards obfuscate the existing legal protections. For a detailed analysis of the relative consumer liability protections of major payment systems, see Ann H. Spiotto, Credit, Debit, or ACH: Consequences & Liabilities: A Comparison of the Differences in Consumer Liabilities, 3 FED. RES. BANK OF CHI. EMERGING PAYMENTS OCCASIONAL PAPER SERIES (2001).


\textsuperscript{155} There is no float on checks in Canada, a factor contributing to the lower rate use of checks in Canada than the United States.

\textsuperscript{156} See Bounds, supra note 134, at B1.
without being aware of its costs. The signal that consumers understand is point-of-sale pricing. If consumers knew the price of payment, there would be less demand for credit, and market forces would exert downward pressure on the cost of credit, both in transactions and in finance, as these two services are bundled in credit cards. Since the Federal Reserve Board has undertaken its first ever comprehensive review of Regulation Z, which implements TILA, the time is now ripe for a reconsideration of what is the most effective method for conveying the cost of credit to consumers.

XIII. SUBSIDIZATION LEVEL 1: CREDIT CONSUMERS BY NON-CREDIT CONSUMERS

Subsidization of credit consumers by non-credit consumers is a straightforward theoretical proposition, corroborated by the limited existing empirical evidence. My research has uncovered only one study that has attempted to quantify the extent of the subsidization of credit consumers by cash consumers. The study analyzed data from two surveys of gasoline station prices for unleaded fuel. Retail gasoline is the only example of an industry-wide attempt at cash discounts. At its peak, in 1989, 34% of U.S. gasoline retailers had cash discounts. One survey was conducted in Delaware in 1983 and covered 127 gas stations of the 480 in the state. The other survey was conducted in Washington State in 1989 and covered 406 stations of the 750 in the state. The study controlled for population density (as a proxy for traffic flow), self-service versus full-service, presence of a repair or convenience facility, and number of nearby stations. While the choice of unified or two-tiered pricing was influenced in part by the cost of credit transactions to each gasoline franchise, the data analysis resulted in T-statistics of well over 2.00 in both surveys. The results were similar: the price charged to consumers in a one-price system was higher than the cash price, but lower than the credit price in a two-tiered system. This indicates subsidization of credit consumers by both cash consumers and merchants.

In Delaware in 1983, the base price for credit customers at stations with

157. Delayed charges that appear only on a monthly statement and are not apparent at point-of-sale, like many ATM fees, do not have the same effect on consumer decisions as charges presented at point-of-sale, when the consumption decision is made.
158. See Bar-Gill, supra note 28, at 1381; see also Barron et al., Working Paper, supra note 27; Barron et al., supra note 27, at 89.
161. See infra Part XVIII.E for further discussion of the FRB’s review of Regulation Z.
162. See Barron et al., Working Paper, supra note 27, at 6.
163. See id. at 16.
164. See id. at 3.
165. See id. at 17-18.
two-tiered pricing was 2.37¢ per gallon higher than at stations with unified pricing, while customers taking advantage of the cash discount with two-tiered pricing paid 1.82¢ per gallon less than at stations that had unified pricing. In other words, the average cash discount, and thus the marginal cost of a credit transaction over a cash transaction, was 4.19¢ per gallon.

At stations with a unified pricing system, 2.37¢ per gallon of the 4.19¢ per gallon or 57% of the marginal cost was absorbed by the merchant, thus subsidizing the credit consumer. The additional 1.82¢ per gallon or 43% of the marginal cost was passed on to cash customers to offset the merchant’s subsidization of the credit consumers. That is, cash customers at stations with unified pricing in Delaware in 1983, when the average national gasoline price was $1.204 per gallon, paid an extra 1.82¢ per gallon so the merchant could subsidize the credit customers 2.37¢ per gallon.

**Chart 2**

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<th>Retail Gasoline Pricing in Delaware, 1983</th>
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In Washington State in 1989, the base price for credit customers at stations with two-tiered pricing was 3.38¢ per gallon higher than at stations with unified pricing, while customers taking advantage of the cash discount with two-tiered pricing paid 1.48¢ per gallon less than at stations that had unified pricing. In other words, the average cash discount, and thus the marginal cost of a credit

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166. See id. at 18; Barron et al., supra note 27, at 102.  
168. See Barron et al., supra note 27, at 102.  
169. See Barron et al., Working Paper, supra note 27, at 18; Barron et al., supra note 27, at 102.
transaction over a cash transaction, was 4.86¢ per gallon.

At stations with a unified pricing system, 3.38¢ per gallon of the 4.86¢ per gallon or 70% of the marginal cost was absorbed by the merchant, thus subsidizing the credit consumer. The additional 1.48¢ per gallon or 30% of the marginal cost was passed on to cash customers to offset the merchant’s subsidization of the credit consumers. Put another way, cash customers at Washington stations with unified pricing in 1989, when the average national gasoline price was 98.5¢ per gallon, paid an extra 1.48¢ per gallon or so that the merchant could subsidize the credit customers 3.38¢ per gallon.\textsuperscript{170}

**Chart 3**

![Retail Gasoline Pricing in Washington, 1989](image)

Presented differently, 1.5% of what cash customers paid at the pump in Delaware in 1983 at stations with unified cash/credit pricing went to the merchants to allow them to grant a subsidized discount of 2% to credit customers. In Washington, in 1989, 1.5% of what cash customers paid at the pump at stations with unified pricing went to merchants to allow them to grant credit customers a discount of 3.4% from the full cost of a credit purchase.

57% and 70% of the marginal cost of credit transactions were absorbed by Delaware and Washington gas retailers, respectively, while 43% and 30% of the marginal cost of credit transactions were passed on to cash customers in the respective states. The findings of the gasoline pricing study confirm that cash consumers subsidize the transaction costs that credit consumers impose on

\textsuperscript{170} See Barron et al., \textit{supra} note 27, at 102.
merchants for using credit.

XIV. SUBSIDIZATION LEVEL 2: CREDIT CARD INDUSTRY BY MARGINAL INCREASE IN CREDIT CARD USERS

The subsidization of credit consumers by cash consumers makes the cost of credit purchases relatively lower and the cost of non-credit purchases relatively higher. This leads to overuse of credit cards as a payment system, which itself amounts to a subsidy for the credit card industry. As more consumers use credit, more consumers are also likely to become lucrative revolvers who pay interest, rather than "deadbeats" who enjoy the convenience of the float.  

Allowing private no-surcharge rules and duplicating them in state law gives the credit card industry a tremendous windfall and supports the use of a payment system that, although convenient, is accompanied by a host of negative social effects.

XV. SOCIAL COSTS OF OVERCONSUMPTION OF CREDIT

The social costs of the overconsumption of credit have been amply examined elsewhere. It is impossible to resolve the net social welfare impact of overconsumption of credit, as there are cross-cutting effects. An abundance of credit has positive effects on economic growth, but it also has severe social externalities. Because consumers are neither fully informed nor rational in their credit consumption, there is a strong argument that greater weight should be given to the social distress caused by overconsumption of credit. We should be chary of assuming that consumers make informed, rational credit decisions about their proper level of credit consumption. Consumers routinely overestimate their ability to pay off credit card loans, in part because they do not perceive the cost of a credit transaction the same way they do for a cash transaction. Many cardholders are often confused or in denial of their account status. In a recent survey by RoperASW, 75% of cardholders said that they do not make major purchases they cannot pay off immediately, while 69% said they do not make any charges at all when they cannot pay off the bill immediately. Moreover, 58% of those surveyed said they usually pay in full per month.

The survey responses are inconsistent with actual consumer behavior. Only

171. MasterCard and Visa, which together account for three-quarters of the credit card transactions in the United States, make 88% of their revenue from interest. See Ronald J. Mann, Credit Cards and Debit Cards in the United States and Japan, 55 VAND. L. REV. 1055, 1095-96 tbl.2 (2002).
172. See, e.g., SULLIVAN, WARREN & WESTBROOK, supra note 30; MANNING, supra note 29; Bar-Gill, supra note 28; WARREN & TYAGI, supra note 17.
174. See id.
38-44% of consumers actually pay off their credit card bills in full and on time on a regular basis. The remaining 56-62% only pay off about 10% of their balance each month. The inconsistency between consumer descriptions of their debt habits and their actual behavior corresponds with what the Cambridge Consumer Credit Index calls the “Reality Gap.” The Reality Gap is the difference between the percentage of consumers interviewed who said they planned to pay down their debt in the next month and the percentage who actually did so within the following month. The Reality Gap averaged 23% over the 41 months it was measured. As of April 2005, it had been as high as 46% in any given month, but it had never dipped beneath 6%. The Reality Gap suggests that consumers “always intend to use less credit than they actually use.”

This discrepancy between consumers’ anticipated or described behavior and their actual behavior might be due in part to the manner in which credit cards appear to unleash the spending constraints consumers would otherwise have. When one pays with a charge card, it does not seem as if one has paid in the same way as if dollars have been taken from a wallet and changed hands. The bargain that the consumer has struck is not driven home as much when the consideration is transferred in an electronic form. Americans’ credit card consumption display a phenomenon known in behavioral psychology as risk underestimation.

While consumers may be able to pay off their credit card debt when they are employed and healthy, contingencies like unemployment, medical emergencies, and divorce can interrupt debt service. Once this occurs, compound interest especially can become an inescapable quagmire when higher default interest rates kick in. Consumers who are unable to service their debt are forced into painful cutbacks in their general consumption, often impacting children who have had no role in spending decisions. Frequently, consumers who are unable to service their debt file for bankruptcy protection. In a bankruptcy, unsecured creditors, ranging from credit card companies to dentists and plumbers, typically only recover a small percentage of the loan. This in turn can have a domino effect of other bankruptcies.

176. See id.
178. Id.
179. Id.
180. See Prelec & Simester, supra note 28, at 11; see also supra text accompanying notes 103-05.
181. See Bar-Gill, supra note 28.
consumer bankruptcies increase public reliance on welfare, social security, and Medicaid, the costs are born by all taxpayers. Card companies target recent bankrupts with barrages of card offers, knowing that they are in need of credit and have little choice other than to accept high interest rates and that they are unable to obtain another bankruptcy discharge for eight years.\footnote{183}

Credit generally has an inflationary effect on the entire economy by increasing the amount of funds available for spending. Overconsumption exacerbates the effect. The inflationary effect occurs with varying magnitudes, depending on whether it occurs directly on merchant’s good pricing or trickles down to residential rental pricing, for example. The inflationary effect limits the Federal Reserve Board’s control of monetary policy and particularly hurts those who cannot get credit—the poorest Americans, who are more likely to make cash purchases than credit.\footnote{184} Poor, cash-only consumers are further hurt by having to pay higher prices to subsidize credit consumers.

Moreover, to the extent that the price of market goods and services increases faster than actual income, consumers purchase less, as purchasing power decreases. Instead, their “consumption decisions are distorted toward non-market goods” and services, such as leisure or home-cooked meals, whose “retail” prices remain unaffected.\footnote{185} Similarly, cash-only consumers, in particular, have less purchasing power to the extent they are subsidizing credit consumers. Moreover, credit consumers with revolving balances—63% of credit card users and 50% of adult Americans\footnote{186}—have less purchasing power for new goods and services because of increased debt service, which currently is 13% of the average American’s post-tax income.\footnote{187} Americans on average now spend more on debt service than their disposable personal income.\footnote{188} In short, debt service has the same effect as inflation on purchasing power. This hurts the entire economy, as it lowers demand for goods and services. A stagnating American economy hurts U.S. Treasury bond prices, which in turn, makes it that much harder for the largest credit consumer of all—the U.S. government—to raise funds for its obligations. Catastrophic default may not be on the horizon, but we should not overlook the potential social costs of

\begin{itemize}
  \item 184. As of around a decade ago, over 90% of families with annual income of over $100,000 had at least one credit card, while only 25% percent of Americans with annual family income of under $10,000 had a credit card. \textit{Usage of General Purpose Credit Cards by Families: 1989 and 1992}, \textit{Statistical Abstract of the United States}, Table 811 (1995). In this age of aggressive subprime lending, inability to get credit is less of a concern than might it otherwise be, but remains a factor for many poor Americans.
  \item 185. Katz, supra note 22, at 39.
  \item 187. See \textit{Warren} & \textit{Tyagi}, supra note 17, at 113; see also Lohr, supra note 17, at D1.
  \item 188. See Marshall & Luhby, supra note 182.
\end{itemize}
overconsumption of credit. Given the exponential increase in debt as a result of compounded interest, a small amount of debt can become insurmountable in a very short time.

XVI. IS THERE A MERCHANT MARKET FOR TWO-TIERED PRICING?

Would merchants and consumers take advantage of two-tiered pricing if it were possible? Were one merely to look at the American experience with cash discounts, it would appear not. Only the retail gasoline industry attempted cash discounts on a large scale, and it has generally phased them out. Yet, merchant behavior shows some sensitivity to the different costs of payment systems. Some merchants do not accept credit cards at all because of the costs, and others do not accept American Express because of its higher discount rate. Moreover, many merchants who do accept credit cards impose a minimum amount for credit transactions, even though this is in violation of their private agreements and often contrary to state law. In Denmark this year, 19% of retailers (primarily grocery stores, a very low-margin business) began imposing a debit card surcharge on consumers, even though Danish law does not appear to allow for such surcharges. Indeed, when the fees are too high vis-à-vis profits on a transaction, merchants will abandon a payment system, even if it means fewer sales, as occurred in the “Boston Fee Party.” In 1991, American Express raised its discount rate, which was already significantly higher than MasterCard or Visa. In response, over 250 Boston restaurants, lead by Jasper White’s restaurants, threatened to stop accepting American Express. American Express relented, but the incident shows that merchants are not indifferent to the pricing of payment systems.

Why have so few merchants in the US offered cash discounts? The most convincing explanation was offered by Paul Gewirtz, then attorney for the Consumers Union, in his testimony to the Senate in 1975. According to Gewirtz, merchants are more reluctant to offer cash discounts than credit surcharges because with a cash discount they would have to advertise their higher, credit-based price, thus giving an edge in attracting customers to merchants who could get a lower discount rate. With credit surcharges, though, merchants could advertise the lower cash price. Other explanations

189. See Barron et al., Working Paper, supra note 27, at 3; see also Barron et al., supra note 27, at 89; Kitch, supra note 36, at 230 (noting that gas stations were an industry uniquely suited for granted discounts because customers can predict size of purchase without any initial shopping and purchases are less than the amount of cash that customers usually carry with them).
190. See Evans & Schmalensee, supra note 125, at 29.
191. See EVANS & SCHMALENSEE, supra note 11, at 169-72.
192. See also U.S. Senate Subcommittee on Consumer Affairs of the Committee on Banking, Housing, and Urban Affairs, Hearings on FCBA Two-Tier Pricing and Procedures for Federal Reserve Board Regulation Writing, 94th Cong. 1st. Sess. 17-18 (1975) (testimony of Paul Gewirtz).
193. See Kitch, supra note 36, at 225; see also testimony of Paul Gewirtz, supra note 192.
offered are that regulatory barriers may make cash discounts relatively more expensive and that merchants may fear a backlash from customers.\textsuperscript{194} Also merchants may see accepting credit cards as merely another efficiently bundled service, like parking, showrooms, or helpful sales staff, that the seller can provide at lower cost than the consumer.\textsuperscript{195}

Some more mundane reasons may also explain the general absence of cash discounts. Many merchants probably do not know that they are allowed to give cash discounts. It is quite possible that many smaller merchants think that their agreements with the card networks prohibit both surcharges and discounts. Many of the more sophisticated, larger merchants offer their own credit card, either through their own network or as part of the MasterCard or Visa networks, so they have fewer incentives to offer a cash discount.

There may also be a grounding effect of current law and trade practice. Merchants are also consumers. The United States' population is simply unused to cash discounts and credit surcharges as a regular course of business and therefore probably views two-tiered pricing with some degree of suspicion, not understanding the underlying economics. Two-tiered pricing can also have a déclassé edge to it, with cash transactions being associated with under-the-table or tax-avoidance transactions. Merchants, in their role as consumers, are hesitant to do unto others what they would not have done unto themselves.

Examination of western countries with no-surcharge restrictions also shows that two-tiered pricing is infrequent, either by surcharge or by discount, when allowed.\textsuperscript{196} Five European countries\textsuperscript{197} currently ban surcharge restrictions, as does Australia.\textsuperscript{198} In the U.K., where surcharges have been permitted for ten years, they are employed mainly by travel agencies, taxi cabs, and sports, theater, and cinema venues. Among major retailers, only the discount furniture chain Ikea surcharges.\textsuperscript{199} In 2003, Australia banned surcharge restrictions, and since then a wide-range of merchants have begun to institute two-tiered pricing.\textsuperscript{200} Sweden and the Netherlands both banned no-surcharge rules in the

\textsuperscript{194} See Hunt, supra note 93, at 10.
\textsuperscript{195} See Kitch, supra note 36, at 223.
\textsuperscript{196} An examination of the full panoply of legal rules governing payment systems, particularly of those rules that might affect a consumer’s choice of payment system, such as fraud or theft liability, is beyond the scope of this paper, but would have an impact on choice of payment system. For example, liability for check forgery in most European countries is on the drawer, not on the drawer’s bank. Accordingly, Europeans use personal checks at a much lower rate than Americans.
\textsuperscript{197} See supra note 85.
\textsuperscript{199} NILSON REPORT, Issue 819, at 6-7 (Sept. 2004).
\textsuperscript{200} The Reserve Bank of Australia’s regulations allow merchants to surcharge up to the additional cost of the credit transaction. See NILSON REPORT, Issue 771, at 1, 5 (Sept. 2002). A MasterCard survey found that 8% of the 400 merchants surveyed have implemented a credit surcharge, sometimes as a flat fee, but usually in the 1-5% range. See Yahoo Australia New Zealand Finance, Credit Card Surcharging on the Rise, http://au.pfinance.yahoo.com/041013/l/bk9.html. A more recent survey has indicated that
1990s. In the Netherlands in 2000, ten percent of retailers had credit surcharges and nine percent offered discounts for other payment systems. But of the retailers who knew that surcharges were allowed, eighteen percent had instituted them. In Sweden in 2000, only five percent of retailers imposed surcharges on MasterCard or Visa, but Swedish law only prohibits card networks from banning surcharges; acquirer banks can still impose no-surcharge rules and most of them do.

In spite of this rather obvious explanation for the low percentage of surcharging Swedish merchants, those merchants who do not surcharge (whether or not their acquirer bank forbids it) offered many reasons: possible negative cardholder reaction or loss of customers (37%); a matter of principle (32%); a preference for not dealing with cash (12%); have never considered surcharging (9%), contrary to trade custom (7%), or did not know they could surcharge (3%). Almost no merchants in Sweden offer a cash discount.

Swedish merchants’ reasons for offering no discount include a desire not to differentiate between customers by means of payment (29%); a preference for avoiding cash handling (23%); lack of a need to offer discounts (19%); never having considered discounting (12%); negative cardholder reactions and loss of customers (11%); inability to afford such a measure (8%); that it is too impractical (2%). It is evident that many merchants are uncomfortable with the idea of two-tiered pricing.

It seems that many merchants have not instituted surcharges or discounts because of a collective action problem. If they act unilaterally, they fear that
they will lose business. Notably, very few merchants are concerned about the practicability of two-tiered pricing. It would seem that increased computerization of merchandizing makes two-tiered pricing easier to implement. Just as one now pushes a button to see shipping rates for online purchases, it is easy to envision such a function for cash or credit costs on-line or at the register. While there appears to be significant hesitancy by merchants over two-tiered pricing, it is also clear that there is a fair percentage of merchants who would engage in it. Two-tiered pricing, of course, is never mandatory, but one suspects that more merchants would take to the concept if there were greater familiarity with such a system. Whether or not merchants would take advantage of it, part of a free market place is having the ability to set prices to reflect costs. As J. Craig Shearman of the National Retail Federation put it, "One thing we [retailers] would certainly like is the ability to have a surcharge for credit-card use."  

XVII. IS THERE A CONSUMER MARKET FOR TWO-TIERED PRICING?

Would consumers take advantage of two-tiered pricing by moving to less expensive payment methods than credit? Several factors weigh in a consumer's decision to take advantage of two-tiered pricing: constraints on cash on hand; relative ease of transaction; size of discount; size of transaction; level of fraud/theft liability protection by payment system; ease of dispute resolution; and record-keeping concerns. Consumers who have limited cash on hand or need to reserve it for cash-only transactions are reluctant to make cash purchases, even if there is a cash discount or credit surcharge.

The size of the discount, both in percentage terms and in absolute terms (related to the size of the transaction) is also a significant factor. A consumer who might not terribly mind paying 1.5¢ extra a gallon of gas in order to have the faster transaction with the credit card, would likely balk at paying an additional $1,500 on a college tuition or automobile purchase, even if the cash/check discount were at the same rate. Even small surcharges or discounts have aggregate costs or savings that can be substantial, but few consumers monitor their finances sufficiently to see that cost in the aggregate. For consumers who want purchase records, a credit card will give them a better record than a cash receipt. In the United States, credit cards also provide relatively strong theft liability protection, as well as easier dispute resolution both because of ability for a consumer to identify a dispute during the float before payment and because the negotiating leverage of the card issuer with merchants.

International data indicates that consumers are very sensitive to the costs of

payment systems when they are confronted with explicit pricing at point of sale and thus realize the costs they must internalize. In Norway and Finland, the central banks both used pricing to persuade consumers to move from checks, which have high processing costs, to electronic fund transfers, such as debit cards, which have low processing costs. In Finland, a fee of approximately 10¢ per check virtually eliminated use of checks. In Norway, the use of checks declined 70% between 1989 and 1995 after the central bank imposed a surcharge on checks, and resulted in savings equal to 0.6% of Norway’s GDP.

Likewise, data from the Swedish and Dutch 2000 surveys indicates consumer sensitivity to costs of payment in a two-tiered pricing system when informed of the costs at point-of-sale. In Sweden, 60% of the surcharging merchants surveyed stated that around 42% of credit cardholders refrained from paying with credit when informed about a credit surcharge. In the Netherlands survey, merchants estimated that about 27% of the customers refrain from paying with credit cards when informed of a credit surcharge.

Recent developments in Australia also indicate that when offered a two-tier pricing system that includes credit surcharges, consumption of credit slows. In January 2003, the Reserve Bank of Australia enacted new regulations that prohibited all bans on credit card surcharges or on cash discounts. This decision was based largely on a commissioned study that concluded that surcharges cause economically excessive use of credit cards because "distorted prices may lead consumers to make the wrong choices among credit and charge cards... for sufficiently large price differentials, some consumers will be willing to switch among different types of payment mechanisms." In 2003, there was a marked slowing in the rate of growth of the dollar volume of credit card spending in Australia. In April and May 2002, the dollar volume of credit card spending rose 49% and 42% respectively. In April and May 2003, after the prohibition of surcharge bans, the growth in dollar volume of credit card spending rose a mere 6% and 4.5% respectively, even as many merchants

210. Humphrey et al., supra note 141, at 223, 231.
211. Id. at 18.
212. ITM RESEARCH, supra note 65, at 8.
214. Id. at 8.
The Antitrust Super Bowl continued with unified pricing.\textsuperscript{217}

Since 2003, however, Australian card usage has continued to rise at a fairly rapid rate. This does not mean that the Australian reforms were unsuccessful. The elimination of no-surcharge rules is not meant to eliminate credit card usage, just reduce it to the optimal level. One has to wonder what the level of Australian credit card usage would be without the Reserve Bank of Australia’s reforms.

The continued growth of credit card use in Australia since 2003 can be explained by three factors. First, many merchants have not started surcharging. Many merchants have adopted a wait-and-see approach, unwilling to take the risk of being among the first to surcharge, but over forty percent of merchants are planning to add surcharges within the year.\textsuperscript{218} Second, the RBA’s reforms only affected MasterCard and Visa. American Express and Diner’s Club have been using this to their advantage as they increase market share.\textsuperscript{219} The effect of partial regulation has been to shift card use between card brands instead of lowering card use. And third, MasterCard and Visa have changed their pricing so that they can compete without the artificial protection of no-surcharge rules. In late 2003, the Australian credit card networks reduced their interchange rates by nearly half.\textsuperscript{220} The drastic reduction in interchange rates shows that Australian credit card transactions were priced too high to compete in a free payment system market. Exactly how the decreased interchange fee has been split between merchants and consumers is unknown. Given that surcharging is still not widespread in Australia, it stands to reason that all consumers, not just non-credit consumers, might have gained through generally lower prices; at the very least, merchants—and likely non-credit consumers—have benefited.\textsuperscript{221} Determining this empirically is probably impossible, however. Moreover, as credit card issuers experienced decreased revenue from interchange fees, they made expensive reward programs less generous, and some imposed higher annual fees or higher interest rates.\textsuperscript{222} The net effect has been to force credit card users to internalize more of the costs of their choice of payment system,

\begin{itemize}
  \item \textsuperscript{217} Id.
  \item \textsuperscript{218} See Merchants Mull Credit Surcharges: Survey, supra note 200.
  \item \textsuperscript{219} Terry McCrann, At Last, We Have the Credit Where It’s Due, SUNDAY MAIL, Aug. 21, 2005, available at http://www.theadvertiser.news.com.au/common/story_page/0,5936,16329062%255E255E913,00.html.
  \item \textsuperscript{220} Evans & Schmalensee, supra note 125, at 37; Matt Wade, Credit Card Overhaul Attacked, SYDNEY MORNING HERALD, July 30, 2005, available at http://www.smh.com.au/news/business/credit-card-overhaul-attacked/2005/07/29/1122144018270.html (reporting that average interchange fees have dropped from 0.95% of transaction value to 0.55%).
  \item \textsuperscript{221} Evans & Schmalensee, supra note 125, at 37-38.
  \item \textsuperscript{222} Id. at 37. Australian issuing banks, in an attempt to regain their former profit levels, have also begun to switch to American Express and Discover brands, which have higher merchant discount rates. Whether this will be successful is questionable, as merchants are no longer faced with an all-or-nothing option for accepting credit cards. A merchant who might not find it worthwhile to pass along a 1.5% MasterCard discount rate in the form of a credit card surcharge to consumers might well pass along a 5% American Express discount rate.
\end{itemize}
which in turn should affect their future choice of payment system.

XVIII. INCENTIVES FOR REMOVING SURCHARGE RESTRICTIONS

Given the costs of no-surcharge rules—inflation, subsidization of credit consumers by cash consumers, overuse of credit with its concomitant problems—why hasn't there been an attempt made to correct this market inefficiency? One reason that credit surcharge restrictions have remained largely unchallenged since 1984 is that few of the parties affected by them have a particularly strong incentive to lobby for change.

A. Major Card Network Incentives

The major credit card networks support no-surcharge rules because the rules allow the networks to charge uncompetitively high interchange fees and because the rules channel consumers toward the sticky trap of compound interest. To summarize the earlier discussion in this article, no-surcharge rules combine with the trickle down of interchange fees and discount rates to make credit relatively cheaper than other payment systems.\(^2\) This results in increased credit card usage both as a percentage of consumer's payments and in terms of absolute number and dollar value of purchases. Moreover, no-surcharge rules limit price competition between credit card networks, as there is no cost difference between cards to consumers at the point of sale. Not only do MasterCard and Visa stand to lose more because of the abolition of no-surcharge rules, but they stand to gain less. While MasterCard and Visa have recently developed their own PIN-based debit products, they are far less dominant within the payment systems industry for PIN-based debit products. Therefore, if no-surcharge rules were abolished, not only would payment systems in which MasterCard and Visa do not compete directly gain, but their competitors would experience a larger gain within PIN-based debit payment systems. There is no incentive for the major credit card networks and their constituent members to abandon surcharge restrictions.

That being said, it is curious that MasterCard rescinded without comment its no-surcharge rule for all of Europe effective as of January 1, 2005. MasterCard has retained the rule for other regions. It is likely this move was done in anticipation of antitrust action by European governments.\(^2\)\(^2\)\(^4\)

The sheer scale of the revenue generated by no-surcharge rules shows just how important they are to credit card networks. Interchange fees alone generated $24 billion in revenue for the card networks last year.\(^2\)\(^2\)\(^5\) If the

\(\text{supra}\) Part VIII.A.

\(^2\)\(^2\)\(^4\) \text{See supra Part VIII.A.}

\(^2\)\(^2\)\(^5\) \text{See MASTERCARD BYLAWS AND RULES, Rule 18.A.2.3 (Oct. 2004); see also NILSON REPORT, Issue 819, at 6 (Sept. 2004).}

\(^2\)\(^2\)\(^5\) Frank Norton, \textit{Card Companies Pushing Save-with-Plastic Campaigns}, RALEIGH NEWS & OBSERVER,
The Antitrust Super Bowl

Australian experience is any lesson, about half of that revenue would not exist without no-surcharge rules.\(^{226}\) While it is impossible to calculate what percentage of annual interest and penalty/late fee revenue is attributable to no-surcharge rules, it likely constitutes a far greater sum than the interchange fee revenue. No-surcharge rules are crucial to two major sources of credit card network revenue.

**B. Merchant Incentives**

Merchants, too, have only limited incentives to challenge the system. Merchants have an "all or nothing" choice. They can either accept credit cards and absorb the cost into their overall cost structure, or they can refuse to accept credit cards completely, which puts them at a disadvantage, or at least a perceived disadvantage, vis-à-vis merchants who accept credit cards.\(^{227}\) Merchants bear the costs of surcharge restrictions, to the extent that they subsidize credit consumers. These costs are offset to the extent that non-credit consumers overpay for payment services and to the extent that relatively cheaper prices for credit consumers results in an increased number of credit sales at higher prices than a consumer would generally pay. When credit becomes relatively cheaper for consumers in a unified pricing system, consumers shift more of their purchases to credit. Although a greater percentage of credit transactions increases costs to the merchant, it also has the effect of increasing the total number of purchases consumers make and the price that consumers are willing to pay, as generous lines of credit do not have the restraining effect of cash on hand.\(^{228}\) More credit sales at higher prices and higher prices for cash consumers mitigate merchants' costs of subsidizing credit consumers when there is unified pricing.

Whether accepting credit cards increases merchants' sales is questionable. The Federal Reserve Board's congressionally commissioned study failed to find that "any strong, consistent relationship exists between credit cards and incremental sales among retailers as a group" because "many unplanned purchases were transacted by cash and many of those transacted through credit cards would likely have been undertaken even without access to a credit card."\(^{229}\) Indeed, one economic model predicts that unified pricing would actually decrease the total number of transactions.\(^{230}\) The accuracy of the


226. See supra note 220.
228. Recently a woman named Antoinette Millard made national news by running up credit card bills in excess of $1 million. See Lohr, supra note 17.
229. Credit Cards in the U.S. Economy, supra note 50, at 6.
230. See Marius Schwartz & Daniel R. Vincent, Same Price, Cash or Card: Vertical Control by
FRB’s report and the economic model is beside the point, because merchants believe that they will receive benefits from accepting credit cards. One survey found that 58% of merchants believe that their profits will increase if they accept credit cards, and card networks vigorously promote acceptance of cards as a means of increasing sales. As long as merchants believe that accepting credit cards will increase their profits, they are unlikely to push for changes to the no-surcharge restriction rules.

That being said, merchants will continue to push for better bargains on discount rates. With the average discount rate on credit cards in 2004 at 2.03% of transaction value and on debit cards at 1.39% of transaction value, merchants, especially those with thin profit margins, care about the issue tremendously. When credit card networks like MasterCard and Visa came into widespread use, they were a great boon to smaller retailers because the availability of these cards to consumers negated the advantage of large retailers who were able to offer their own credit cards. The mom-and-pop store that accepted credit cards was no longer at a disadvantage vis-à-vis Sears because it could not offer extensions of credit to essentially anonymous customers. Today, though, the tables have been turned, as large retailers like Wal-Mart have used their bargaining strength to negotiate more favorable discount rates than small retailers.

Elimination of no-surcharge rules would likely lower discount rates across the board, which would be relatively more advantageous to small retailers; even if they could not negotiate as favorable a discount rate as large retail behemoths, the competitive impact would be lessened. In the end, it does not matter if most merchants are not concerned about no-surcharge rules because it only takes one merchant and an enterprising class-action attorney to file an antitrust suit to dislodge no-surcharge rules. Indeed, on June 22, 2005, a class-action antitrust suit was filed against MasterCard and Visa and their member banks for the collective setting of interchange rates and the bundling of payment processing and other services, both behaviors intimately related to no-


232. See supra text accompanying notes 146-49.
233. See Norton, supra note 225.
235. See Zywicki, supra note 21, at 93.
236. See Bounds, supra note 134, at B1.
237. See infra Part XIX. It should be noted that the most formidable of the interchange/no-surcharge suits filed so far, that brought by Kroger and six other large grocery/drug store retailers, is not a class action suit. Although a judgment could benefit all merchants via res judicata, a settlement would accrue only to the benefit of these retailers—helping them better compete against Wal-Mart and mom-and-pop stores.
surcharge rules. In the following four months, thirty-nine other similar suits have been filed.

C. Consumer Incentives

Consumer incentives are also warped by no-surcharge rules. Most consumers are both cash and credit consumers. Accordingly, under the current one-price system, it makes sense for consumers to take advantage of the relatively cheaper cost of credit rather than to be cost subsidizers. Consumers are happy enough to play along with the system and benefit from it through cheaper credit when credit is more convenient than cash, rather than demand cost internalization.

Credit and debit card networks spend a tremendous amount advertising and promoting their products and reinforcing the perception that plastic is a more convenient payment system than cash, but cost-equivalent. Indeed, some issuers offer significant discounts off an initial purchase for opening a credit account. Credit cards also bundle benefits such as frequent-flyer miles or cash back or rewards points for consumers. Economists Sujit Chakravorti and William R. Emmons have argued that credit card companies need affinity programs in order to keep convenience, float-only users ("deadbeats") from defecting to merchants who do not accept credit cards and accordingly are able to price lower. The affinity programs are thus a subsidy to the "deadbeats" at the expense of the revolvers in order to keep the "deadbeats" using their cards in the hope that they will become lucrative revolvers. Chakravorti and Emmons, however, do not show whether this lure to keep "deadbeats" using the credit card network is in fact subsidized by higher interest rates on revolvers or


240. See Carow & Staten, supra note 154, at 420.

241. MasterCard’s advertising mantra is “There are some things that money can’t buy. For everything else, there’s MasterCard.” If it can be bought, the commercial implies, MasterCard is available as a payment system. Visa spent more than $350 million on advertising in major US media in 2004. Stuart Elliot, Advertising: Visa USA Decides It Wasn’t Where It Wanted to Be, N.Y. TIMES, Nov. 15, 2005, at C13.

242. In 2004, 53% of all credit card offers included some type of rewards program, up from 30% in 2002. See CardTrak, Card Debt (Apr. 2004), http://new.cardweb.com/cardtrak/pastissues/april2004.html. Curiously, cash back was the most common reward offered (90% of all reward offers), even though it should be obvious that consumers pay more in order to get cash rebated. See id. About a third of debit cards now offer some form of rewards program too, although it appears that the card issuers are still honing the economics of the rewards programs. See Robin Sidel & Ron Lieber, Debit-Card Issuers Pile on Rewards, and Fret, WALL ST. J., Nov. 17, 2005, at C1.

whether it is also paid for, at least in part, through higher interchange and merchant discount rates. In any case, if the Australian experience of interchange rates dropping in half as a result of reforms, including the abolition of no-surcharge rules, translates to the United States, then elimination of no-surcharge rules should result in the average American household saving $117 per year.\textsuperscript{244} For most deadbeats, and even for some revolvers, these savings are probably outweighed by the value of bundled benefits.

Be this as it may, affinity programs and bundled benefits obviously come at some cost, but consumers, especially the approximately forty percent who use credit cards only for convenience and the float and pay off their balances in full and on time ("deadbeats" or "freeloaders"),\textsuperscript{245} do not perceive any cost. Credit cards do not generally itemize a charge for receiving frequent flyer miles or the like. The only place where a consumer is likely to perceive such a cost is in an annual fee. Most consumers, however, only consider the annual fee when initially applying for a credit card, so they consider it as the cost of a bundled extension of credit and opportunity to gain some other reward like frequent flyer miles. Although the bundling of miles programs is quite efficient for the deadbeat, when only the direct costs are calculated\textsuperscript{246} it is affirmatively inefficient for revolvers, many of whom did not intend to become a revolver,\textsuperscript{247} and might well be inefficient for all consumers once the social costs of overconsumption of credit are factored in. The net efficiency question remains open, though, as neither the direct nor the indirect costs of the bundled miles or rewards points are ever revealed to the consumer. It is far easier for consumers to perceive the benefits of the payment systems than to figure out the costs.\textsuperscript{248}

\textit{D. Governmental Incentives}

Since credit card networks, consumers, and merchants have little incentive to challenge the current system through self-regulation or market action, this leaves only legislative, regulatory, or litigatory intervention to correct the market failure. Federal legislative or regulatory intervention would be the most logical, given that surcharge restrictions are a national problem. In 1984, Congress considered but rejected a bill that would have banned surcharge restrictions, as well as a bill to extend the Cash Discount Act's surcharge

\begin{itemize}
  \item \textsuperscript{244}See Norton, \textit{supra} note 225 (merchant fees cost the average American household $232 per year according to merchants).
  \item \textsuperscript{245}See \textit{supra} note 153.
  \item \textsuperscript{246}See \textit{supra} text accompanying notes 119-23.
  \item \textsuperscript{247}See \textit{supra} text accompanying notes 172-79.
  \item \textsuperscript{248}Accordingly, some critics have cogently proposed bans on affinity programs. See, e.g., Ronald J. Mann, \textit{Global Credit Card Use and Debt: Policy Issues and Regulatory Responses} 52-56 (Univ. of Texas Sch. of Law, Law and Econ. Working Paper No. 49, Apr. 2005), available at http://ssrn.com/abstract=509063 (proposing ban on affinity programs because they unduly incentivize credit card use).
\end{itemize}
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ban. Since then, the issue has not arisen on a federal level. Neither merchant nor consumer groups have particularly strong incentives to eliminate surcharge restrictions, and credit card networks have strong incentives to maintain them, so the relative lobbying resources and political pressures exerted on the federal state would cut strongly in favor of the credit card networks.

The main reason that surcharge and discount restrictions received such close attention during the period from 1976 to 1984 was because of the concern about inflationary effects of overconsumption of credit at a time when inflation was a major economic and political issue. Without the pressing inflation concern, the initiative against surcharge restrictions died away for lack of interest. Potentially, surcharge restrictions could become a political issue again as consumer credit card debt continues to rise to troubling levels for the entire economy. Until Congress becomes sufficiently concerned about the level of consumer credit card debt, though, it is unlikely to reconsider a bill banning surcharge restrictions.

Given Congress's 1984 rejection of legislation banning surcharge restrictions and the Cash Discount Action's definition of discounts to exclude surcharges, it is doubtful that any Federal regulatory agency could successfully claim statutory authorization for regulatory action against surcharge restrictions, other than in the context of antitrust enforcement for the manner in which no-surcharge rules are used. Indeed, the Department of Justice's Antitrust Division is currently investigating credit card antitrust violations. State legislative or regulatory intervention might run afoul of federal preemption, especially from the Office of the Comptroller of the Currency, which has been aggressively asserting its preemption powers to protect national banks from consumer protection actions by state attorneys general, particularly Elliot Spitzer of New York. Given the difficulties in passing uniform state laws, state action would be at best a partial solution to a national problem.

E. The Federal Reserve Board's Comprehensive Review of Regulation Z

Recently, a new possibility of a reconsideration of allowing no-surcharge rules emerged. The Federal Reserve Board has announced that is will be undertaking the first-ever comprehensive review of Regulation Z, which implements TILA. The FRB's review of Regulation Z was in response to the marked growth of consumer use of open-ended or revolving lines of credit, particularly those accessed through credit cards. The FRB is seeking to

249. See Kitch, supra note 36, at 228.
determine whether Regulation Z is achieving its purposes, among them "to permit consumers to make informed decisions about the use of credit." In particular, the review aims to determine whether TILA’s mandatory disclosure schedules are getting “timely information to consumers in a readable form” to promote comparison-shopping among open-ended lines of credit.

TILA disclosure schedules are widely considered to be ineffective at facilitating informed consumer choice because consumers do not read them, do not understand them, and do not remember the information contained in them when making purchasing decisions. TILA schedules should function as price tags for borrowing, but the schedules fail to actually show the full cost of credit to the consumer, as they do not account for the increase in prices of merchants who accept credit cards in order to cover the costs of doing so. At best, TILA schedules are useful for comparison for consumers who want to open a line of credit. Since the consumer only sees the price of using credit when opening a line of credit, and not when actually borrowing against it, TILA disclosures are not useful for a consumer who is deciding whether to finance a transaction by drawing down on a particular line of credit, perhaps years after it was opened.

To understand why TILA schedules are ineffectual in influencing actual borrowing decisions as opposed to the opening of a line-of-credit, consider the typical scenario in which a consumer receives a credit card application by mail. The proper TILA schedule is enclosed with the solicitation. The consumer fills out the enclosed application, is approved for a line of credit, and receives a card a couple of weeks later.

What has happened with the TILA schedule itself? The chances are that the consumer did not read the schedule. Even if the consumer read it, he probably does not understand it in any meaningful way what the applicable interest rate is and when it applies. It is even more unlikely that the consumer has a practical understanding and can calculate how quickly the interest will compound on a particular balance. Thus, a consumer will hardly be able to comparison shop between lines of credit or between payment methods if he does not know or understand the prices involved.

Should a consumer be conscientious enough to read the TILA disclosure

253. Id. at 5.
254. Id.
255. TILA disclosures are still useful for consumers comparing lines of credit in order to decide which to open (but not whether to draw down on the line). They are also useful for maintaining transparency in the credit market in order to protect against discriminatory lending practices and ensure fair dealing. Whether the costs that TILA disclosures impose justify their benefits is a matter beyond the scope of this paper.
256. See supra note 157.
schedule and fully understand it, it is still quite unlikely that the consumer will remember the information when making a decision about whether to purchase on credit and between various lines of credit. Consumers receive TILA schedules when they apply to open lines of credit, not when they draw down on them. There is usually a lag of a couple of weeks between the application for and extension of a line of credit. The first use of the line of credit might be some days later, and repeated use of the line of credit might last years into the future. The TILA schedule is long forgotten by the time the consumer uses the credit card and actually borrows against the line-of-credit for the first time, much less for the umpteenth time, which could be years later. Thus, the TILA schedule is not considered when the combined purchasing/payment method decisions are made. Therefore, even if the consumer could understand the TILA schedule and use it for a meaningful comparison, he lacks the information when he actually needs it, at the point of sale. TILA schedules, at best, help the consumer decide whether to open a particular line of credit, not whether to use it.

Even for the exceptional consumer who is conscientious enough to read the TILA schedule and understand it and remembers the information on it when it is time to make the purchasing and payment decisions, the cost of credit is still not apparent and cannot be taken into account in decision making because of the disclosures that TILA does not mandate, namely the price increase that merchants institute for accepting credit transactions. TILA disclosures fail to impact either consumers purchasing or payment method decisions. These decisions are not made in an informed manner, so the likelihood of efficient consumption levels either of goods and services or of payment systems is quite low.

A better method for conveying information about the cost of credit to consumers would be market signaling through prices at point-of-sale; this would require banning no-surcharge rules. A higher point-of-sale price for credit transactions would show consumers the true cost of credit to them if they were "deadbeats"—essentially the cost to the merchant of accepting credit cards. Two-tiered point-of-sale pricing would serve as a warning label, like a skull and crossbones on poison or a Surgeon General’s warning on tobacco and alcohol products, and put consumers on notice of the minimal costs they will have to internalize with a credit purchase. Higher point-of-sale prices for credit purchases would have a healthy cautionary effect on consumer use of credit and would compensate for consumers not understanding or recalling the TILA disclosure "price tag." If the FRB is serious about effecting the purpose of TILA—ensuring that consumers receive the information necessary to make

257. For revolvers, the true cost of credit is much higher because of the backside costs such as compound interest at high rates and penalty rates for a wide panoply of defaults (often including cross-defaults) that do not exist with other payment methods.
informed, meaningful decisions about whether to borrow and from whom—it will give major consideration to following the example of the Reserve Bank of Australia\textsuperscript{258} and banning the credit card networks' market-restraining no-surge charge rules. Point-of-sale, market-driven signaling would be far more effective than convoluted TILA-schedule disclosure by the regulated parties so far \textit{ex ante} that the information disclosed is likely forgotten if it was ever read, much less understood.

It is unlikely, though, that even if the FRB wished to ban surcharge restrictions that it could do so through promulgating regulations under TILA.\textsuperscript{259} TILA’s delegation of regulatory authority to the FRB most likely does not include the ability to ban surcharge restrictions as the Cash Discount Act’s definition of discounts excludes surcharges; Congress itself declined to ban surcharge restrictions in 1984. Moreover, although the FRB has been delegated certain authority under TILA, it does not believe that it has the authority to regulate credit or debit cards.\textsuperscript{260} If the FRB were to determine that surcharges are a problem that should be remedied through regulatory action, it would need to lobby Congress, in the face the powerful credit card industry lobby, to pass authorizing legislation for regulatory action against no-surcharge rules.

\textbf{F. Debit Card Issuer Incentives}

As payment systems shift from paper to electronic, it is necessary to distinguish between the substitution of an electronic payment system and the competition among electronic payment systems to be the substitute system. Paper transactions are grossly inefficient for consumers, merchants, and banks. Cash always carries a theft or counterfeit risk and is impractical for large transactions. Similarly, while checks do not have the problems of theft and transaction size limitations, they carry a credit-risk problem, and the check-clearing process is extremely inefficient and costly.\textsuperscript{261} By one estimate, the US could save 1% of its GDP by eliminating paper checks.\textsuperscript{262} Because of paper transactions’ various inefficiencies, paper transactions have been declining in the US as electronic payment systems gain in viability. The switch from paper to electronic transactions, however, does not speak to whether the switch

\begin{itemize}
\item \textsuperscript{258} See supra text accompanying notes 213-20.
\item \textsuperscript{259} See supra Part XVIII.D.
\item \textsuperscript{260} What’s at Stake in the Interchange Wars, THE GREEN SHEET, Issue 05:11:02, 70, Nov. 28 2005, available at \url{http://www.greensheet.com/pdf/051102.pdf} (statement of Stuart E. Weiner, Vice President and Director of Payment System Research of the Federal Reserve Bank of Kansas City).
\item \textsuperscript{261} See generally Swartz, supra note 140.
\end{itemize}
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should be to credit, off-line debit, or on-line debit transactions. In other words, electronic payment systems are a substitute for paper payment systems, not their competition per se. Rather, the competition that exists is between electronic payment systems for the market share being ceded by paper payment systems. Even though debit cards are a substitute for checks, their real competition are credit cards.

The interests of debit card issuers regarding no-surcharge rules divide between off-line and on-line debit cards. MasterCard and Visa, the two largest credit card networks, have interests on both sides of the credit/debit divide, as they own the major off-line debit card networks. Their no-surcharge rules apply to both the credit and debit products. MasterCard and Visa have little incentive to foster competition between their own products. Indeed, it is in their interest to steer consumers toward credit cards because even though off-line debit has lower transaction costs, it does not produce lucrative revolving balance accounts paying compound interest; their no-surcharge rules have exactly that effect. Transactions are steered toward credit cards from other payment system, including off-line debit. Yet, the no-surcharge rules also protect off-line debit cards from cheaper, more efficient competition, such as on-line debit cards. Given the two hats they wear simultaneously as credit and debit networks, MasterCard and Visa have no interest in seeing the abolition of no-surcharge rules.

On-line debit card networks, such as Interlink, NYCE, Pulse, and Star also have no-surcharge rules, and are themselves starting to be the targets of antitrust suits based on their setting of network interchange rates. Nevertheless, they would likely experience a net benefit from the abolition of all no-surcharge rules. Most consumers are currently unaware of the difference between on-line and off-line debit and usually have no choice as to which one will be used—the decision is the merchant’s. While the benefits to consumers are the same for on- and off-line debit transactions, other than minor variations in fraud protection and transaction speed, the costs to the merchant are substantially different. On-line debit cards are significantly cheaper than credit cards and off-line debit, but still cost merchants more per transaction than checks or cash. Moreover, debit cards in general offer a finality to transactions that credit cards do not, because there are no costly chargebacks on debit. Thus, on-line debit should see gains vis-à-vis credit and off-line debit cards were no-

263. Visa (Interlink) and MasterCard also have on-line debit card products, but these products are recent additions to their product lines.

264. These four companies accounted for 88.7% of the on-line debit market in 2003. See NILSON REPORT, Issue 809, at 7 (Apr. 2004).


surcharge rules abolished.

The cost-efficiency advantage of on-line debit over off-line debit and credit cards should outweigh any slowing of substitution of on-debit for paper payment systems because of the slightly higher cost per transaction of on-line debit to the merchant vis-à-vis cash or check transactions. Indeed, even without the on-line debit card networks’ no-surcharge rules merchants are unlikely to price on-line debit cards differently than check or cash transactions. First, the cost difference to merchants between on-line debit and paper transactions is much smaller than that of credit cards or off-line debit cards. Second, merchants have non-cost reasons to prefer debit transactions over paper generally, so they are unlikely to pass the costs on to consumers, lest they discourage debit transactions. From the merchant’s perspective, debit cards are preferable to cash because of elimination of theft risk, and to checks because of the elimination of credit risk and improved transaction speed.

Even if merchants priced on-line debit higher than checks or cash upon the abolition of a no-surcharge rule, this would probably do little to deter convenience users from using debit; the question for consumers would be the choice of electronic payment systems, not the choice of payment systems in general. Over the last decade, check use has steadily declined in the United States. The decline in check use has been virtually mirrored by an increase in debit use. (See Chart 4).
No-surcharge rules for debit and credit cards have certainly added to the decline of checks, but the major factor driving the switch from paper to electronic payment systems is convenience. Electronic payment cards serve as a substitute for checks (and cash) for most point-of-sale transactions for consumers. Indeed, Visa calls its off-line debit card a “Visa check card.”

That debit cards, rather than credit cards, have served as the major substitute for checks, is not surprising, given that transactions that would otherwise have been made by check or cash are transactions in which the consumer does not care about the extension of credit. Ignoring the small float available on checks in the US, debit cards function like checks or cash in that they draw on one’s current cash reserves. From the consumer’s perspective,
however, debit cards are superior to cash and checks in several ways. Debit cards are secure against theft loss, unlike cash, and they do not involve the hassle of carrying around a checkbook and pen. On-line debit cards offer faster transactions than checks. While no-surcharge rules tip the scales further in favor of consumers using electronic payment systems, the basic shift is occurring for unrelated reasons of convenience; half of electronic payment systems users cite convenience as the primary factor in their choice of payment system. This means that the gains that on-line debit cards will make vis-à-vis credit cards and off-line debit cards with the abolition of no-surcharge rules would be far greater than any loss caused by a slower rate of conversion from paper to electronic payment systems.

No-surcharge rules force merchants to price on-line debit cards the same as off-line debit cards or credit cards, which negates on-line debit card issuers' ability to compete with credit cards on the basis of cost. Therefore, to the extent that on-line debit card issuers see the major competition for their product as being off-line debit cards and credit cards rather than cash or checks, they have a strong incentive to see the end of no-surcharge rules.

G. Retail Card Issuer Incentives

Retailers who offer in-house credit cards, as many gas station and department stores do, have a strong incentive to see an end to no-surcharge rules. Their situation is much like that of on-line debit card issuers. To the extent that their cards compete with credit card networks rather than cash or checks, they stand to gain from an end to no-surcharge rules. In-house retail card issuers like Sears, Macy's, The Gap, and Shell Oil would benefit from surcharges because they can price lower than general-purpose credit cards like MasterCard or Visa, as the primary purpose of their cards is to create brand loyalty. Indeed, in-house retail card issuers have supported banning no-surcharge rules. One only has to imagine how pleased general-purpose card networks would be if retailers began posting signs listing surcharges: "American Express—6%, Visa—3%, our card—0%." The framing effect that has protected the major credit card networks until now would whipsaw them with full force.

269. See Kitch, supra note 36, at 231.
270. See id.
XIX. THE POSSIBILITY AND LIMITS OF ANTITRUST LITIGATION

Given that none of the parties involved—card networks, merchants, consumers, and the government—have strong incentives as a group to correct the market inefficiency caused by no-surcharge rules, individuals within those groups might still be able to partially rectify the situation through private antitrust litigation. This route has already been tried with astounding success, resulting in the largest antitrust settlement in history on a related matter.

In 1996, Wal-Mart and other retailers filed an antitrust suit against MasterCard and Visa, challenging the card networks’ “honor all cards” rules as anti-competitive tying. The “honor all cards” rule required that any merchant who accepted a MasterCard or Visa branded card had to accept all cards of that brand, regardless of issuer or if credit or debit. Therefore, merchants who wanted credit card business also had to accept MasterCard and Visa debit cards. MasterCard and Visa only offered off-line debit cards at the time. While on-line and off-line debit cards are completely interchangeable to consumers (indeed, usually the same plastic card will function as both), they have very different acceptance costs to merchants. Merchants therefore prefer that all debit transactions be conducted as on-line debits. The “honor all cards” rule forced them to accept off-line debit cards, however. Wal-Mart’s suit was never decided on the merits. After Wal-Mart succeeded in getting a class certified and defeated the card networks’ summary judgment motion, a settlement was reached on the eve of trial. It was the largest antitrust settlement in history. The card networks paid Wal-Mart and the rest of the class $3.05 billion and agreed not to apply the “honor all cards” rule to debit cards. While the Wal-Mart suit was not decided on its merits, the sizeable settlement and agreement to modify the “honor all cards” rule indicates the strength of the case against the credit card networks.


273. See Table 8 in the Appendix.


276. See id.

277. See In re Visa Check/MasterMoney Antitrust Litig., 297 F. Supp. at 508. The honor-all-cards rule is still in effect for MasterCard and Visa with regard to premium and non-premium credit cards. The rule obliges merchants to accept both regular credit cards and premium credit cards that offer consumers more rewards points but bear a higher interchange rate.

At first glance, it would appear that a strong case could also be made that the credit card networks violate antitrust laws through no-surcharge rules. The combination of interchange fees and surcharge restrictions that impede merchants from passing on the cost of those fees to consumers are anti-competitive exercises of market power.\textsuperscript{279} No-surcharge rules involve an anti-competitive business practice by an actor—the credit card networks—with major market force. The anti-competitive activity comes from two types of product tying: a bundling of credit with the underlying good and a tying of the price of credit to the price of other payment systems. The bundling of credit with the underlying good is technically the merchant’s choice, which weakens the antitrust argument. The tying of different payment systems’ prices, however, does have serious anti-competitive effects on in-house retail cards, on-line debit card networks, and even Federal Reserve Notes and personal checks.

The market power of the major credit card networks within the credit card market is indisputable,\textsuperscript{280} and even within the general payment systems market it is formidable, as it includes both the credit and debit card brands of the major networks. Indeed, the Second Circuit’s approval of the Wal-Mart antitrust settlement essentially gave its blessing to the proposition that the networks possess significant market power.\textsuperscript{281} This puts the burden of proving a pro-competitive rationale on the card networks, and it is hard to find any counterbalancing pro-competitive rationale for the no-surcharge rule. Arguments about the need to protect networks from price discrimination by local monopolistic merchants are unconvincing and are undercut by MasterCard’s recent voluntary repeal of its no-surcharge rule for Europe.\textsuperscript{282} If no-surcharge rules are needed to protect against merchants’ anti-competitive behavior, it makes little sense for MasterCard to have rescinded its rule.

\textsuperscript{279} See Frankel, supra note 25, at 314.

\textsuperscript{280} See supra note 86.

\textsuperscript{281} See In re Visa Check/MasterMoney Antitrust Litig., 280 F.3d 124, 129 (2d Cir. 2001).

\textsuperscript{282} See David Balto, New Competitive Challenges for Credit and Debit Cards, 16 CREDIT CARD MGMT. 2 (Feb. 2004), available at http://www.cardforum.com/article.html?id=20040202Y7JVC80X.
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voluntarily. Moreover, MasterCard and Visa have not gone out of business in Australia as a result of that country's ban on no-surcharge rules. Given the antitrust scrutiny that European Commission and Australian regulators have recently given to surcharge restrictions, it stands to reason that no-surcharge rules might also run afoul of antitrust provisions in the United States.

Several problems might stand in the way of such an antitrust suit. First, under the current heavily criticized case law, monopoly status might be in doubt, given the other forms of payment systems available.\textsuperscript{283} The Wal-Mart summary judgment decision, however, shows that this is at least an issue open for debate. Second, the possibility of discounting instead of surcharging weakens any economic argument about the negative effects of no-surcharge rules, because the purely economic (as opposed to behavioral economic) equivalent of surcharging is available by federal law. Third, merchants are not forced into setting any particular price, only that they cannot discriminate on prices based on payment systems. A merchant could price all transactions at the cost of credit and thus absorb none of the costs, even if the volume of sales would be lower. Indeed, the only way that issuers can convince merchants to accept cards with no-surcharge rules is if merchants believe that they are better off with that deal than with not accepting credit cards altogether.

Fourth, proper pleading of the complaint could be a problem. Federal, but not all state, antitrust law allows only direct purchasers to sue for price fixing because of the uncertainty over the amount of the non-competitive price that is passed on by direct purchasers to indirect purchasers.\textsuperscript{284} Merchants do not purchase credit card services from MasterCard and Visa directly, but from member banks. The Supreme Court, however, has noted that there may be exceptions to this rule in cases where there is common control of the antitrust violator and the direct purchaser.\textsuperscript{285} Lower courts have also recognized an exception when the direct purchaser is in conspiracy with the producer, even

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\textsuperscript{283} See United States v. E.I. du Pont de Nemours & Co., 351 U.S. 377 (1956) (manufacturer of cellophane did not possess market power because there were many substitute products); see also Nat'l Bancard Corp. v. Visa U.S.A., Inc., 596 F. Supp. 1231 (S.D. Fla. 1984), aff'd, 779 F.2d 592 (11th Cir. 1986) (credit card network could not possess market power because of existence of competing payment systems such as cash and checks). These cases have been heavily criticized in the antitrust academic literature as the "Cellophane fallacy," because the Court failed to recognize that the other products were only used as substitutes for cellophane because it was being sold at the non-competitive monopoly price. See, e.g., Dennis W. Carlton & Alan S. Frankel, The Antitrust Economics of Credit Card Networks, 63 Antitrust L.J. 643 (1995).

\textsuperscript{284} Ill. Brick Co. v. Illinois, 431 U.S. 720, 729-41 (1977); Kansas v. UtiliCorp United, Inc., 497 U.S. 199, 208-12 (1990). Given that UtiliCorp was decided in the context of a network economic situation—tariff-regulated power utilities—where it was very clear how much of costs were passed along, it is doubtful that courts would find a network exception for credit cards. For the inapplicability of Illinois Brick to state antitrust claims, see California v. ARC America Corp., 490 U.S. 93 (1989). California has enacted a statute to prevent the application of Illinois Brick to state antitrust claims. See Union Carbide Corp. v. Superior Court, 36 Cal. 3d 15 (1984).

\textsuperscript{285} Ill. Brick, 431 U.S. at 736 n.16.
when there is no common control. This has proved to be an obstacle for suits by merchants that are not careful to allege the proper details of a conspiracy to restrain trade, such as interlocking boards of directors. It is not a per se bar, however, as the progress of the Wal-Mart litigation to summary judgment shows. Merchant suits have also been derailed by failing to plead cognizable antitrust injuries—injuries to competition, not to competitors. Moreover, suits by competing payment systems, such as debit card networks, might find themselves hampered by unclean hands because of their own no-surcharge rules.

Fifth, price-fixing suits against MasterCard and Visa face an uphill climb because of the Supreme Court’s decision in *Texaco v. Dagher.* Dagher held that a legitimate joint venture’s setting of prices is not per se illegal under section 1 of the Sherman Act because they are one entity so there is no price-fixing agreement between competing entities, and so it is to be reviewed under the more onerous rule of reason analysis. Dagher left open the question of whether a legitimate joint venture could ever be engaged in price fixing, even under rule of reason analysis. At present MasterCard and Visa are functionally joint ventures, although MasterCard’s planned IPO will change its structure into a regular, publicly traded corporation. At the very least, *Dagher* means that antitrust plaintiffs against MasterCard and Visa must now meet a more exacting standard of review.

Finally, the existence of state anti-surcharge laws precludes suits in ten states, and the Cash Discount Act “could be read to imply [Congressional] approval of contractual restrictions on surcharges.” Indeed, even if an antitrust suit were successful in removing contractual no-surcharge rules, state law no-surcharge rules would still serve as a pricing restraint, especially for merchants with multi-state operations. Therefore, Congressional action would still be the most effective intervention. That being said, the current likelihood of Congressional action inimical to credit card networks is remote; the credit card industry might well be the most powerful lobby in Congress. As Newsweek’s Jonathan Alter has written, “History should remember the 109th as the Credit Card Congress.”

292. Id. at *10 n.2.
293. Kitch, supra note 36, at 228. Alternatively, though, these laws requiring the possibility of cash discounting could serve as alternative statutory causes of action.
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It will be interesting to see how the in-house retail cards and on-line debit card networks react as they continue to lose market share to general-purpose credit cards and off-line debit cards, in spite of being a cheaper payment system. The money at stake is tremendous; arguably, the entire merchant discount rate is the measure of anti-competitive profits. This has ranged from roughly 1% to 6% over the last few decades. With the treble damages that could be sought in a class action antitrust suit, damages would be in the range of 1% to 18% of all charge card transactions in the United States for the last four years. This is an inconceivably large sum, measured in hundreds of billions, if not trillions of dollars. MasterCard’s potential liability alone could be nearly $100 billion.

The Wal-Mart suit, which settled at $3.05 billion, a fraction of the damages sought, was a historic high for an antitrust settlement. The Wal-Mart suit sets a benchmark that is much lower than what is possible in a no-surcharge rule suit because of the smaller number of merchants impacted by the honor all cards rule for debit cards than by no-surcharge rules. As David A. Balto, one of the attorneys who has brought suit against MasterCard, Visa, and their member banks for their interchange rate setting, has put it, the Wal-Mart case was merely the playoffs; the battle over no-surcharge rules and interchange rates are the “Super Bowl” of antitrust litigation.

XX. CONCLUSION: NOT EVEN HALF-TIME YET

No-surcharge rules and state laws prohibiting credit card surcharges create an imbalance in the payment systems market that results in the inefficient overuse of expensive payment systems like credit cards at the expense of other payment systems. This has resulted in overall higher prices for non-credit consumers in order for merchants to subsidize credit consumers. Subsidization should be an open and direct political issue, not one that sneaks in among the dim vagaries of network economics. No-surcharge rules have helped credit card companies make a fortune over the last thirty-five years, a few pennies at a time, without anyone really noticing. It also has an inflationary effect on the economy and shifts American consumers’ resources from the purchase of new goods and services to the servicing of credit card debt against compound


297. MasterCard averages approximately $9 billion in interchange fees. NILSON REPORT, Issue 851, at 7 (Feb. 2006). Assuming that this rate holds during the course of legal proceedings that last three years and including the four year antitrust statute of limitations, MasterCard will have earned approximately $63 billion in interchange fees during the time period subject to suit. Based on the Australian experience, one can posit that about half of these fees are an illegal profit, which with treble damages would be a staggering $94.5 billion.
298. See Balto, supra note 281.
interest at remarkably high rates.

The relationship between no-surcharge rules and the growth of credit card debit is vividly illustrated by the 43% slower growth rate of credit card debt in Australia after no-surcharge rules were banned, and the Australian card networks’ halving of interchange rates in response. Unfortunately, neither card networks nor many merchants nor individual consumers have much incentive to change the system. Despite lacking any policy justification beyond enriching the credit card industry, no-surcharge rules will continue unless there is successful antitrust action; the Federal Reserve recognizes that point-of-sale pricing, rather than \textit{ex ante} TILA schedules, is the most effective method for conveying the cost of credit; or Congress finally takes the problem of mounting consumer credit card debt seriously as a threat to the national economy. Huge sums and the future of America’s electronic payment systems are at stake. Tune in soon to the antitrust Super Bowl, coming to a courthouse near you . . . we might all be winners.

<table>
<thead>
<tr>
<th>Transaction Size</th>
<th>$10</th>
<th>$25</th>
<th>$50</th>
<th>$100</th>
<th>$300</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VISA Credit-CPS Retail 2</td>
<td>$0.37</td>
<td>$0.60</td>
<td>$0.98</td>
<td>$1.74</td>
<td>$4.78</td>
</tr>
<tr>
<td>MC Credit-Merit III</td>
<td>$0.43</td>
<td>$0.67</td>
<td>$1.08</td>
<td>$1.90</td>
<td>$5.17</td>
</tr>
<tr>
<td>Off-Line Debit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VISA Debit-Offline (Signature) CPS Retail</td>
<td>$0.43</td>
<td>$0.6</td>
<td>$0.89</td>
<td>$1.46</td>
<td>$3.75</td>
</tr>
<tr>
<td>VISA Debit-Offline (Signature) CPS Retail 2</td>
<td>$0.51</td>
<td>$0.64</td>
<td>$0.86</td>
<td>$1.31</td>
<td>$3.10</td>
</tr>
<tr>
<td>MC Debit-Offline (Signature) Merit III</td>
<td>$0.43</td>
<td>$0.60</td>
<td>$0.89</td>
<td>$1.46</td>
<td>$3.75</td>
</tr>
<tr>
<td>On-Line Debit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interlink Network (VISA)</td>
<td>$0.14</td>
<td>$0.51</td>
<td>$0.67</td>
<td>$0.68</td>
<td>$0.68</td>
</tr>
<tr>
<td>Maestro (MC)</td>
<td>$0.43</td>
<td>$0.53</td>
<td>$0.69</td>
<td>$0.70</td>
<td>$0.69</td>
</tr>
<tr>
<td>Star</td>
<td>$0.43</td>
<td>$0.53</td>
<td>$0.69</td>
<td>$0.69</td>
<td>$0.69</td>
</tr>
<tr>
<td>NYCE</td>
<td>$0.43</td>
<td>$0.52</td>
<td>$0.64</td>
<td>$0.64</td>
<td>$0.64</td>
</tr>
</tbody>
</table>

Source: Visa and MasterCard Interchange Increases—Move to Pin-Based Debit Now!, BANKING SERVICES NEWSLETTER (Univ. of Cal., Office of the President, Office of the President, Vol. 3.1, 2005


300. See Evans and Schmalensee, supra note 125, at 37.

<table>
<thead>
<tr>
<th></th>
<th>Interchange Rate Applied to</th>
<th>Interchange Rate Percentage of Sale</th>
<th>Flat Fee</th>
<th>Rate Applied to Purchase of:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>$10</td>
<td>$50</td>
<td>$100</td>
</tr>
<tr>
<td>CPS/Retail-Credit</td>
<td>1.38% $0.05</td>
<td>$0.19</td>
<td>$0.74</td>
<td>$1.43</td>
</tr>
<tr>
<td>CPS/Retail 2-Credit (Emerging Markets)</td>
<td>1.43% $0.05</td>
<td>$0.19</td>
<td>$0.77</td>
<td>$1.48</td>
</tr>
<tr>
<td>CPS/Hotel &amp; Car Rental</td>
<td>1.58% $0.10</td>
<td>$0.26</td>
<td>$0.89</td>
<td>$1.68</td>
</tr>
<tr>
<td>CPS/Card Not Present</td>
<td>1.80% $0.10</td>
<td>$0.28</td>
<td>$1.00</td>
<td>$1.90</td>
</tr>
<tr>
<td>CPS/Automated Fuel Dispenser</td>
<td>1.50% $0.05</td>
<td>$0.20</td>
<td>$0.80</td>
<td>$1.55</td>
</tr>
<tr>
<td>CPS/Supermarket-Credit</td>
<td>1.20% $0.00</td>
<td>$0.12</td>
<td>$0.60</td>
<td>$1.20</td>
</tr>
<tr>
<td>CPS/Passenger Transport</td>
<td>1.70% $0.05</td>
<td>$0.22</td>
<td>$0.90</td>
<td>$1.75</td>
</tr>
<tr>
<td>Express Payment Service Electronic Interchange Rate (EIRF)</td>
<td>2.00% $0.02</td>
<td>$0.22</td>
<td>$1.02</td>
<td>$2.02</td>
</tr>
<tr>
<td>Retail Key Entry</td>
<td>1.80% $0.10</td>
<td>$0.28</td>
<td>$1.00</td>
<td>$1.90</td>
</tr>
<tr>
<td>Standard (paper)</td>
<td>2.30% $0.10</td>
<td>$0.33</td>
<td>$1.25</td>
<td>$2.40</td>
</tr>
<tr>
<td>AVERAGE ALL CREDIT CARDS</td>
<td>1.87% $0.07</td>
<td>$0.26</td>
<td>$1.01</td>
<td>$1.94</td>
</tr>
<tr>
<td>AVERAGE ALL DEBIT CARDS</td>
<td>0.38% $0.17</td>
<td>$0.21</td>
<td>$0.36</td>
<td>$0.55</td>
</tr>
<tr>
<td>CPS/Retail-Check Card (off-line)</td>
<td>1.25% $0.10</td>
<td>$0.23</td>
<td>$0.73</td>
<td>$1.35</td>
</tr>
<tr>
<td>CPS/Supermarket-Check Card (off-line)</td>
<td>0.00% $0.40</td>
<td>$0.40</td>
<td>$0.40</td>
<td>$0.40</td>
</tr>
<tr>
<td>AVERAGE OFF-LINE DEBIT</td>
<td>0.63% $0.25</td>
<td>$0.31</td>
<td>$0.56</td>
<td>$0.88</td>
</tr>
<tr>
<td>New Check Card-Retail (on-line)</td>
<td>0.55% $0.10</td>
<td>$0.16</td>
<td>$0.38</td>
<td>$0.65</td>
</tr>
<tr>
<td>New Check Card-Retail (on-line)</td>
<td>0.00% $0.25</td>
<td>$0.25</td>
<td>$0.25</td>
<td>$0.25</td>
</tr>
<tr>
<td>AVERAGE ON-LINE DEBIT</td>
<td>0.28% $0.18</td>
<td>$0.20</td>
<td>$0.31</td>
<td>$0.45</td>
</tr>
<tr>
<td>Interlink/Supermarket</td>
<td>0.00% $0.15</td>
<td>$0.15</td>
<td>$0.15</td>
<td>$0.15</td>
</tr>
<tr>
<td>Interlink/Non-Supermarket</td>
<td>0.45% $0.03</td>
<td>$0.08</td>
<td>$0.26</td>
<td>$0.48</td>
</tr>
</tbody>
</table>

The Antitrust Super Bowl

Application of VISA 1999 Interchange Rates

<table>
<thead>
<tr>
<th>Transaction Size</th>
<th>$1,000.00</th>
<th>$500.00</th>
<th>$100.00</th>
<th>$50.00</th>
<th>$10.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interchange Fee</td>
<td>$0.00</td>
<td>$2.00</td>
<td>$4.00</td>
<td>$6.00</td>
<td>$8.00</td>
</tr>
</tbody>
</table>

### Table 9. Costs to Australian Retailers by Payment System

<table>
<thead>
<tr>
<th>Payment System</th>
<th>Cost/Transaction to Retailer (AUS)</th>
<th>Percentage of Transaction Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$0.12</td>
<td>0.70%</td>
</tr>
<tr>
<td>Check</td>
<td>$0.49</td>
<td>1.40%</td>
</tr>
<tr>
<td>Debit Card</td>
<td>$0.17</td>
<td>0.36%</td>
</tr>
<tr>
<td>Bank-Issued Credit Card</td>
<td>$1.04</td>
<td>1.90%</td>
</tr>
<tr>
<td>Non-Bank Issued Credit Card</td>
<td>$2.01</td>
<td>2.90%</td>
</tr>
</tbody>
</table>