

50 Follen Street, #511
Cambridge, MA 02138
March 28, 2005

Ms. Jennifer J. Johnson, Secretary
Board of Governors of the Federal Reserve System
20th Street and Constitution Ave., NW
Washington, DC 20551

Re: Docket No. R-1217—Regulation Z implementing the Truth in Lending Act

Dear Ms. Johnson,

The following comments pertain to Q1 (scope of review), Q9 (subsequent disclosures), Q23-Q24 (APR and consumer behavior), Q40 (additional issues for consideration), Q55 (deleting obsolete rules or guidance), Q 56 (recommendations for legislative changes), Q57 (recommendations for non-regulatory approaches); Q58 (reviewing other aspects of Regulation Z). As part of my comments on the Regulation Z review I have attached my working paper entitled “In Credit We Trust? Internalizing the Hidden Costs of Credit” that contains the data, analysis, and arguments supporting the comments below. The paper is also available for download via the SSRN Social Science Research Network at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=673022.

Regulation Z should be revised to ban credit card networks’ no-surcharge rules, much as the Reserve Bank of Australia did in 2003. Doing so would (1) allow for free competition in the payments systems market, (2) allow for costs of credit not currently included in the APR--the merchant’s discount rate and the credit card network’s interchange rate to be revealed to consumers, (3) allow merchant price signaling to indicate to consumers that credit is a relatively more expensive payment method than debit, check, or cash, (4) end the inequitable cross subsidization of credit consumers by non-credit consumers, and (5) remove a major impetus for the overconsumption of credit, as no-surcharge rules allow credit to appear to cost the same at point of sale as other payment systems.

Ideally, Truth in Lending Act (TILA) disclosures facilitate consumer credit decisions by serving as a uniform price tag for credit services. Unfortunately, TILA disclosures are failing to

their job, as evidenced by the rapid growth of American's credit consumption, often on terms that are not understood by consumers, which has led to a troubling rise in the personal bankruptcy filing rate.

While the content and format of TILA disclosures leaves something to be desired, the central problem with TILA disclosures is with the timing of the disclosure. Consumers receive TILA disclosures only at three times: when they receive applications to open lines of credit, when they are approved for a line of credit, or when the terms of the line of credit change. Generally these disclosures relate to the decision of whether to open a particular line of credit, a decision with no or minimal cost (at most an annual fee that is almost always under \$100) for consumers.

These times do not correspond with the times when consumers make the actual cost decision—whether to draw down on a particular line of credit. Thus, while TILA disclosures may impact the low-to-no cost decision of opening a line of credit, they are of little use for the more important decision of whether to draw down on a particular line of credit or whether to use a different payment method or not make a purchase at all. This is because TILA disclosures are significantly ex-ante the payment decision and not at point-of-sale (POS), so consumers have forgotten the precise terms in the TILA schedule. Therefore, consumers are making payment decisions and consumption decisions without actually knowing the cost of credit.

It is particularly troublesome that consumers make consumption decisions without knowing the cost of credit because, as empirical research has shown, consumers routinely underestimate their use of credit (*vis-à-vis* cash as a baseline), in part because they are not physically constrained by cash in hand or by insufficient funds in their bank account. The best solution for this risk underestimation is market pricing of payment systems at POS.

Ideally, a consumer would be able to tell at POS how much a purchase would cost (including any interest, fees, etc. that would be paid, taking into account existing balances, if any, and the consumer's usual payment habits—float or revolver) if made on credit card 1, 2, or 3 and be able to compare that with other payment systems—debit, check, cash. Given that such a system would be extremely difficult to implement (although not impossible with broadband

technology), the next best step is price signaling to consumers through merchant surcharges for use of credit.

The major obstacle to merchant surcharging is a legal one. Currently, the major credit card networks all ban merchant surcharging for credit purchases. Moreover, ten states also ban surcharging by law. No-surcharge rules mask part of the price of credit by forbidding merchants from charging more for credit transactions, even though these transactions cost merchants (and hence consumers) more. POS disclosure of cost of credit can be accomplished in part by banning the no-surcharge rules of credit card networks.

Banning no-surcharge rules would also compensate for a major omission in TILA's calculation of the Annual Percentage Rate (APR) that a lender charges. The APR calculation does not currently include the percentage of each sale that credit card networks charge merchants (the merchant discount rate) and that merchants pass on to customers. Including such a cost of credit in the APR would be very impractical, since it would be merchant by merchant, and product by product. Allowing merchants to pass on the cost of credit in the form of a surcharge, however, would accomplish much the same result as disclosure of this hidden cost of credit in a TILA schedule.

Permitting merchant surcharging would also remove the subsidization of credit consumers by cash consumers and remove an impetus for the overconsumption of credit, which brings with it a host of social and economic problems, from increased inflation to increase personal bankruptcy. Less credit purchasing would mean that less money would be spent on debt service and could be spent directly by consumers on the purchase of new goods and services.

In 2003, after significant study, notice, and comment, the Reserve Bank of Australia adopted standards that forbid surcharge restrictions by credit card networks, and many Australian merchants have begun surcharging for credit purchases. Since then the growth rate of credit card usage in Australia has dropped significantly.

As TILA currently stands, it is at best a constructive notice system for all but the most financially savvy, well-educated, and diligent consumers. To fulfill its purpose of facilitating consumer credit consumption decisions by serving as a uniform price tag for credit, it needs to be transformed into a system that provides consumers with easily understandable information at point-of-sale that allows consumers to compare the cost of credit between different lines of credit and between credit and other payment options.

Sincerely,

Adam J. Levitin
Harvard Law School, Class of 2005

**IN PLASTIC WE TRUST?
INTERNALIZING THE HIDDEN COSTS OF CREDIT**

Adam J. Levitin, Harvard Law School

ABSTRACT

Will that be credit, debit, or cash? When consumers choose between payment systems, they consider the relative benefits, particularly convenience, of the systems in the transaction situation. Consumers do not adequately consider cost, however, in deciding on a payment method because merchants price the same regardless of payment system, even though the transaction costs vary greatly between systems. Accordingly, consumers tend to overconsume the payment system that tends to offer the most benefits—credit cards—even though it is also the most expensive in terms of transaction costs to the merchant and has the greatest potential backside costs to consumers. Overconsumption of credit has significant economic and social costs: 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.

Merchants use uniform pricing, regardless of the cost of payment systems, because they are constrained by credit card networks' no-surcharge rules, as well as by state law in some cases. These private and public legal rules combine with the consumer behavioral bias known as the framing effect to impede merchants from effectively signaling the cost of payment system choice to consumers, which leads to overconsumption of credit.

Congress considered the problem of surcharge restrictions in the early 1980s during the height of inflation, but only enacted half-measures in the face of tremendous credit card industry lobbying pressure. Since the 1980s, Americans' consumption of credit cards has increased at an astonishing rate. It appears that surcharge restrictions will come under new scrutiny, however, as the Federal Reserve Board, concerned by the rapidly increasing growth of consumer debt, embarks on its first-ever comprehensive review of Regulation Z, which implements the Truth-in-Lending Act. The Federal Reserve Board is likely to give renewed consideration to the issue of surcharge restrictions, in light of the recent antitrust scrutiny of credit card networks in the US and Europe and the Reserve Bank of Australia's 2003 decision to ban surcharge restrictions, which has markedly reduced the demand for credit cards in Australia.

The growth of the major credit cards networks' products at the expense of other payment systems networks may also lead to antitrust actions directed at no-surcharge rules. No-surcharge rules put other payment systems at a relative disadvantage to credit cards because the merchant restrictions prevent them from competing for consumers based on costs. Accordingly, it is likely that no-surcharge rules and their role in payment system economics will gain increased attention over the next few years.

WORKING PAPER--DRAFT

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**IN PLASTIC WE TRUST?
INTERNALIZING THE HIDDEN COSTS OF CREDIT**

by

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Over the past 35 years, Americans have displayed an increasingly voracious appetite for purchasing with plastic. The percentage of personal consumption purchased via payment cards has risen from 6% in 1984, the first year when such statistics were compiled, to 22% in 1996,^{footnote¹} while over the same period, paper purchases—cash and checks—have declined from 94% to 78%.^{footnote²} This trend has continued unabated during the last decade (see Tables 1 & 2, below),^{footnote³} in part because credit cards have become the dominant method of payment for the rapidly expanding market of Internet transactions.^{footnote⁴} In 2003, credit and debit cards comprised 42% of all noncash purchases,^{footnote⁵} and in 2004, the number of electronic payments surpassed paper checks.^{footnote⁶}

Not surprisingly, Americans' credit card debt has also accumulated. Total credit card debt outstanding has increased almost ten-fold, from \$71.1 billion in 1980 to \$674.74 billion in 2000.^{footnote⁷} In 2003, Americans had \$2293 of real (non-float^{footnote⁸}) credit card debt per person, \$3632/cardholder, \$6400/household, and \$8000/carded household.^{footnote⁹} American's per capita real

^{footnote¹} See DAVID S. EVANS & RICHARD L. SCHMALANSEE, PAYING WITH PLASTIC: THE DIGITAL REVOLUTION IN BUYING AND BORROWING 25 (1999).

^{footnote²} See *id.*

^{footnote³} Sujit Chakravorti and Alpa Shah, *A Study of the Interrelated Bilateral Transactions in Credit Card Networks*, 2 FED. RES. BANK OF CHI. EMERGING PAYMENTS OCCASIONAL PAPER SERIES 1 (2001). The number of credit card transactions in the United States more than tripled from 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.*

^{footnote⁴} *Id.*

^{footnote⁵} The Federal Reserve System, *The 2004 Federal Reserve Payments Report: Analysis of Noncash Payments Trends in the United States: 2000-2003* (2004) 3, 7-9 available at <http://www.frb services.org/Retail/pdf/2004PaymentResearchReport.pdf>

^{footnote⁶} See US A Today (AP), *Electronic Payments Surpass Paper Checks*, 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 3.

^{footnote⁷} THE NILSON REPORT, Number 730 (Dec. 2000), 6-7.

^{footnote⁸} "Float" refers to the short-term loan that exists between time of purchase and when the next statement's payment is due.

^{footnote⁹} CardTrak (May 2004), at <http://new.cardweb.com/cardtrak/pastissues/may2004.html>.

credit card debt is double that in UK and more than triple that of Australians. ^{footnote¹⁰} What is fueling Americans' ravenous drive towards plastic?

Table 1: PERCENTAGE OF TOTAL DOLLAR VOLUME OF U.S. TRANSACTIONS BY PAYMENT METHOD

	1990	2002	2007 (prediction)
PERSONAL CHECKS	199051.0%	200238.3%	200722.9%
CASH	199025.0%	200219.3%	200718.4%
CREDIT CARDS	199018.5%	200223.9%	200726.9%
DEBIT CARDS (ALL TYPES)	1990.3%	20028.4%	200715.1%
OTHER PAYMENT SYSTEMS	19904.9%	20022.8%	200716.5%

Source: THE NILSON REPORT, Number 799 (Nov. 2003), 6; THE NILSON REPORT, Number 761 (Apr. 2002), 6-7.

Table 2: PERCENTAGE OF U.S. TRANSACTIONS BY PAYMENT METHOD

	1990	2002	2007 (prediction)
PERSONAL CHECKS	199038.0%	200238.3%	200715.7%
CASH	1990.30%	200219.3%	200736.8%
CREDIT CARDS	199014.0%	200223.9%	200716.4%
DEBIT CARDS (ALL TYPES)	19900.3%	20028.4%	200720.9%
OTHER PAYMENT SYSTEMS	19902.31%	20029.8%	200710.0%

Source: THE NILSON REPORT, Number 799 (Nov. 2003), 6; THE NILSON REPORT, Number 761 (Apr. 2002), 6-7.

Convenience, technological improvements, easier accessibility of credit, and greater costs of living relative to cash on-hand are all factors that have pushed Americans to use plastic for more of their transactions. ^{footnote¹¹} Another factor, however, that has received relatively little examination is that the current system of legal rules in the United States, combined with a well-known behavioral bias, has equalized the cost of all payment systems to consumers. When

^{footnote¹⁰} See *id.*

^{footnote¹¹} 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%). See CardTrak (April 2004), at <http://new.cardweb.com/cardtrak/pastissues/april2004.html>.

consumers do not consider the costs, but only the benefits of payment systems, they choose the payment systems with the most benefits—generally credit and debit cards.

Acceptance of a means 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 of payment. As different means of payment—cash, check, debit, credit—have different costs for merchants, one would expect to see these costs reflected in merchants' bundled pricing of payment and goods/services. Identical goods and services purchased using different payment systems should have different costs, reflecting the cost of the payment system. And yet, although sellers' costs of processing a transaction vary significantly between payment systems, credit, off-line debit, on-line debit, check, and cash transactions are almost always priced the same for buyers. This is because the current system of public and private legal rules in the United States, combined with a well-known behavioral bias, constrains sellers from effectively differentiating the price charged to consumers on transactions depending on the method of payment.

Price differentiation signals the relative costs of a good or service to buyers, so restraints on pricing prevent adequate cost signaling.^{footnote¹²} Instead, consumers perceive all payment systems as having the same transaction costs to them, which makes more expensive payment systems, such as credit cards, relatively cheaper, and cheaper systems, like cash, relatively more expensive than if priced at cost. Accordingly, consumers choose among systems based only on factors other than cost, such as convenience, fraud liability, and cash flow constraints. Consumers therefore consider only the benefits, and not the costs of their choice of payment

^{footnote¹²} See, e.g., Michael L. Katz, *Reform of Credit Card Schemes in Australia II: Commissioned Report*, 38, Reserve Bank of Australia, (2001) (“No-surcharge rules alter the nature of competition and thwart the use of retail price signals to guide consumers’ choices among payment mechanisms.”).

system, which causes them underuse the cheapest systems and overuse the system with the most non-price benefits: credit ~~costs~~^{footnote¹⁴}

If merchants ^{footnote¹⁵} were allowed to signal 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 cost-benefit efficient payment system. Fewer credit purchases would have encourage Americans to use credit more wisely,^{footnote¹⁶} increase Americans' rate of savings,^{footnote¹⁷} potentially decrease the alarming number of consumer bankruptcies,^{footnote¹⁸} have an anti-inflationary

^{footnote¹³} This paper the discussion focuses on credit cards compared with all other types of consumer payment systems that have no float other than the clearing period. Most of the analysis, however, applies equally to a comparison of the consumption of all types of debit cards with all non-credit card consumer payment systems. For the sake of clarity, the discussion should be assumed to deal with a binary credit card/non-credit card division except where otherwise noted.

A more specialized question is that of consumer overconsumption of off-line debit transactions. This question raises a unique issue—namely that consumers are 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 are substantially different.

^{footnote¹⁴} The inability of merchants to signal cost of payment also results in an overconsumption of the underlying goods or services as the decision to purchase is interlinked with the decision regarding payment method because credit payments enable purchasing decisions 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.

^{footnote¹⁵} Consumers can only internalize the cost of credit *ex-ante* if it is presented at point-of-sale, by the merchant, rather than later, as a direct charge from the issuer on their bank statements. *See* Alan S. Frankel, *Monopoly and Competition in the Supply and Exchange of Money*, 66 ANTITRUST L. J., 313, 350-51 (1998). Chances are that consumers' decisions about which payment system to use going forward will not be as strongly impact by *ex-post* charges on their bank statement. Indeed, consumers appear to often blame the merchant and not the card issuer for *ex-post* charges, even though *ex-post* charges are imposed by the issuer, as has been the case with debit card usage fees. *See generally* NYPIRG submission the Board of Governors of the Federal Reserve System (July 23, 2004), re: Docket No. O P - 1196, Debit Fee Disclosures, at http://www.federalreserve.gov/SECRS/2004/July/20040727/OP-1196/OP-1196_95_1.pdf.

^{footnote¹⁶} 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 on time far more often then they actually can. *See* Oren Bar-Gill, *Seduction by Plastic*, 98 NW. U. L. REV. 1373, 1396-1402 (2004).

^{footnote¹⁷} *See* ROBERT D. MANNING, CREDIT CARD NATION: THE CONSEQUENCES OF AMERICA'S ADDICTION TO CREDIT 127-32, 291-99 (2000).

^{footnote¹⁸} *See, e.g.,* TERESA A. SULLIVAN, ELIZABETH WARREN & JAY LAWRENCE WESTBROOK, THE FRAGILE MIDDLE CLASS: AMERICANS IN DEBT 108-40 (2000). *See also* Diane Ellis, *The Effect of Consumer Interest Rate Deregulation on Credit Card Volumes, Charge-offs, and the Personal Bankruptcy Rate*, BANK TRENDS 98-05 (FDIC, Div. of Ins., Mar. 1998).

effect on the economy, and result in lower net costs of goods and services for non-credit purchases, thus increasing Americans' non-credit purchasing power. Fewer credit purchases would also result in Americans spending less of their annual income on debt service, which would increase their purchasing power of other goods and services.

I. 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 that applied at the federal level apply with equal force at the state and private level. As a preliminary matter, though, it is necessary to understand the basic structure of credit card payment systems.

Most credit card transactions are conducted using one of the brands of the major card networks: MasterCard, Visa, American Express, Discover.^{footnote 19} The payment systems represented by these networks come in two basic types: open or closed payment 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 regularly bank plays both roles in a network and at times is even both issuer and acquirer in a transaction. When a consumer makes a transaction with a merchant, the issuing 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 the

^{footnote 19} In-house retail cards like those issued by gas stations and department stores are anomalous in regard to surcharge restrictions. See Section XI.G, *infra*.

acquirer bank a percentage of sale fee, known as the interchange fee. The network association—MasterCard or Visa—sets the interchange fee. The acquirer bank in turn charges the merchant a percentage of sales fee, known as the merchant’s discount rate, which will be set high enough to cover the interchange fee. This is in addition to other fees the acquirer might charge the merchant for serving as its acquirer. The acquirer 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 acquirer, so there is no interchange fee. These networks still charge a merchant discount fee.

Credit cards represented only a miniscule percentage of the total number or dollar volume of consumer transactions in the first few decades since their introduction in early 1950s.^{footnote²⁰} 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 acquirer and issuer banks, and those between the acquirer banks and merchants on the one side and between the issuer banks and cardholders on the other. The later tier of agreements often incorporated the network’s operating rules by reference. Standard parts of the operating rules were the so-called No-Surcharge Rules and No-Discount Rules.^{footnote²¹} 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.^{footnote²²} Consumer advocacy groups saw no-surcharge/no-discount rules as negatively affecting cash consumers, and in February 1974, the Consumer Union sued American Express on

^{footnote²⁰} 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. See PAYING WITH PLASTIC, *supra* note 1, at 25.

^{footnote²¹} The no-surcharge rule is known as the “no-discrimination rule” in Europe.

^{footnote²²} 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.

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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.^{footnote²³} The Consumers Union reportedly reached subsequent settlements with other card issuers.^{footnote²⁴} Merchants, however, were unable to take advantage of the settlement because of the disclosure requirements that were at the heart ^{footnote²⁵} of a major piece of pro-consumer legislation, the 1968 Truth in Lending Act (TILA)^{footnote²⁵}

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. The disclosure obligation was on card issuers, but merchants determined pricing on a good-by-good or service-by-service basis. Two-tiered pricing made adequate TILA disclosures near impossible for card issuers.^{footnote²⁷} 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 be increase the APR by whopping 60%, which would (perhaps rightly) scare potential credit consumers and violate state usury ceilings.^{footnote²⁸}

See Edmund W. Kitch, *The Framing Hypothesis: Is It Supported by Credit Card Issuer Opposition to a Surcharge on a Cash Price?* 6 J.L. ECON. & ORG. 217, 220 (1991).

^{footnote²⁴} *See id.*, at 220, n.2.

See, e.g., Mourning v. Family Publications Service, Inc., 411 U.S. 356 (1973).

^{footnote²⁶} Pub. L. No. 90-321 (1968), *codified at* 15 U.S.C. §§ 1601 *et seq.*

^{footnote²⁷} *See* S. REP. NO. 97-23, at 1 (1981).

^{footnote²⁸} *See* Kitch, *supra*, note 23, at 221. *See also* S. REP. NO. 97-23, at 1 (1981); Carl D. Lobell, and Joseph W. Gelb, *The Cash Discount Act*, N.Y.L.J., Dec. 31, 1981, at 3 (usury ceiling concerns).

Not content with their anti-trust settlement(s) alone, consumer groups pressed Congress to amend TILA to allow for cash discounts.^{footnote29} 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.^{footnote30} The result was that Congress amended TILA in 1974 to permit cash discounts, but of no more than five percent, subject to proper disclosure.^{footnote31} Congress instructed the Federal Reserve Board (FRB) to draft disclosure regulations.^{footnote32} While working on the regulations, the FRB was unsure if Congress intended the five percent discount limitation to also apply surcharges given their economic equivalency.^{footnote33} Congress responded in 1976 by specifically prohibiting credit surcharges for three years.^{footnote34} Congress also exempted discounts from state usury and disclosure rules.^{footnote35} The committee reports contain no explanation for the decision to ban surcharges, but to permit discounts of up to five percent.

Congress renewed the surcharge ban in 1978 for an additional three years, but let the ban lapse in 1981.^{footnote36} Several months later, and “only after considerable debate and the addition...of a

^{footnote29} See Kitch, *supra*, note 23, at 224.

See Richard Thaler, *Toward a Positive Theory of Consumer Choice*, 1 J. ECON. BEHAVIOR & ORG. 39 (1980).

^{footnote31} Fair Credit Billing Act of 1974, Pub. L. No. 93-495 § 306, 88 Stat. 1515 (1975).

Id.

^{footnote33} See 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, October 9, 1975). See also S. REP. NO. 97-23, at 2 (1981). See also Kitch, *supra*, note 23, at 225.

^{footnote34} See Pub. L. No. 94-222, §3(c)(1); 90 Stat. 197 (1976).

^{footnote35} See *id.*; S. REP. NO. 97-23, at 2 (1981). The surcharge prohibition had a sunset provision, which was renewed twice, see Financial Institutions Regulatory and Interest Rate Control Act of 1978 (FIRIRCA), Pub. L. 95-630, § 1501, 92 Stat. 364 (1978) (two year extension) and Cash Discount Act, Pub. L. No. 97-25 § 201, 95 Stat. 144 (1981) (three year extension). before the prohibition lapsed in 1984, see Cash Discount Act, Pub. L. No. 97-25 § 201, 95 Stat. 144 (1981) (sunset on February 27, 1984).

^{footnote36} The ban lapsed on Feb. 27, 1981. It was renewed as of July 27, 1981. See note 35, *supra*.

requirement that a study be prepared by the Federal Reserve Board,³⁷ Congress passed the Cash Discount Act, which eliminated the arbitrary five percent limit on cash discounts,³⁸ but reinstated the surcharge ban for a further three years.³⁹

The Senate Committee Report on the Cash Discount Act portrayed the Act as being a pro-consumer action,⁴⁰ but this representation 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.⁴¹ 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."⁴² The Report claims that two-tiered pricing is deceptive to consumers because the sticker price was not always the price paid.⁴³ Allowing cash discounts, the Report argued, would add some price flexibility into the system while still guaranteeing that the sticker price would be the highest price possible:

³⁷ Board of Governors of the Federal Reserve System, CREDIT CARDS IN THE U.S. ECONOMY: THEIR IMPACT ON COSTS, PRICES, AND RETAIL SALES, A STUDY BY THE BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM SUBMITTED TO THE COMMITTEE OF BANKING, HOUSING, AND URBAN AFFAIRS OF THE UNITED STATES SENATE AND THE COMMITTEE ON BANKING, FINANCE, AND URBAN AFFAIRS OF THE UNITED STATES HOUSE OF REPRESENTATIVES PURSUANT TO SECTION 202 OF THE CASH DISCOUNT ACT OF 1981, 4 (1983).

³⁸ Cash Discount Act, Pub. L. No. 97-25 § 102, 95 Stat. 144 (1981).

³⁹ *Id.*, § 201 (extending the surcharge ban for three years).

⁴⁰ *See* S. REP. NO. 97-23, at 3-4 (1981).

⁴¹ *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, February 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, February 18, 1981).

⁴² *See* S. REP. NO. 97-23, at 3-4 (1981).

⁴³ *Id.*, at 4.

...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.^{footnote44}

Two-tiered pricing, either through discounts or surcharges, does make 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}^{footnote45} Indeed, although a merchant could use two-tiered pricing to lure in customers, consumers can always 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 the advertised price, only that it is only for cash payment 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^{footnote46} if a merchant gives fair notice that all credit purchases will be surcharged at a specified rate, hasn't TILA's goal been met? And if so, how exactly has the customer been harmed?

^{footnote44}

Id.

^{footnote45} See S. REP. NO. 97-23, at 11-12 (1981) (letter from Chairman Michael Pertschuk to Senator William Proxmire).

^{footnote46} See note 25, *supra*.

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 was worried about the consumer who is charged a surcharge feeling penalized, but had no problem with the consumer who gets a cash discount feeling like he got a bargain. This was despite there being no economic difference between these situations, just like choosing to call a glass half full or half empty does not change the amount of liquid it contains. The Committee acknowledged that the economic equivalence of cash discounts and credit surcharges,^{footnote⁴⁷} but its concern about the surcharged consumer being penalized exhibited the same behavioral bias as consumers do to surcharges and discounts, which is hardly surprising, as Senators are themselves consumers.

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."^{footnote⁴⁸} 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.^{footnote⁴⁹} 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

^{footnote⁴⁷} S. REP. NO. 97-23, at 3-4 (1981).

^{footnote⁴⁸} Jon D. Hanson & Douglas A. Kysar, *Taking Behavioralism Seriously: Some Evidence of Market Manipulation*, 112 HARV. L. REV. 1420, 1441 (1999).

^{footnote⁴⁹} Framing biases first received widespread attention from the work of Amos Tversky and Daniel Kahneman. See, e.g., Daniel Kahneman & Amos Tversky, *Prospect Theory: An Analysis of Decision Under Risk*, 47 ECONOMETRICA 263 (1979); Amos Tversky & Daniel Kahneman, *The Framing of Decisions and the Psychology of Choice*, 211 SCIENCE 453 (1981); Amos Tversky & Daniel Kahneman, *Rational Choice and the Framing of Decisions*, 59 J. BUS. S251 (1986).

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discounts, in spite of the economic equivalence.⁵⁰ (See Table 1, below.) Accordingly, although the credit card lobby has never loved 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.⁵¹

Table 3: DUTCH CONSUMER OPINION ON SURCHARGING AND DISCOUNTING

	Surcharging %	Giving Discount %
Very Bad	surcharging%26	giving discount %19
Bad	surcharging%48	giving discount %30
Neutral	surcharging%15	giving discount %22
Good	surcharging%7	giving discount %19
Very Good	surcharging%0	giving discount %3
Don't Know	surcharging%4	giving discount %7
Total	surcharging%100	giving discount %100

Source: ITM Research, *The Abolition of the No-discrimination Rule*, Report for European Commission Directorate General Competition, 12 (2000), available at <http://europa.eu.int/comm/competition/antitrust/cases/29373/studies/netherlands/report.pdf>.

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 payment, as a purchase is actually a bundling of an underlying good or service and the service of receipt of payment.⁵² Accordingly, the choice of payment system should be a separate, bargained-for element in a sale.

⁵⁰ See ITM Research, *The Abolition of the No-discrimination Rule*, Report for European Commission Directorate General Competition, 12 (2000), available at <http://europa.eu.int/comm/competition/antitrust/cases/29373/studies/netherlands/report.pdf>.

⁵¹ See *supra*, note 48.

⁵² See Bar-Gill, *supra*, note 16, at 1381. See also John M. Barron, Michael E. Staten, & John Umbeck, *Discounts for Cash in Retail Gasoline Marketing*, Working Paper 57, at 6, Credit Research Center, Kannert Graduate School of Management, Purdue University (September, 1991).

When consumers compare price minimums, they perceive the cost of the underlying good itself plus the baseline cost of payment in *any* method. Surcharges then alert the consumer to the cost of payment systems above the shared baseline cost. 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:

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 uses pay reflect the cost of accepting credit ^{cards}^{footnote⁵³}

Because of the framing effect, only surcharges, not discounts signal to the consumer the relative costs of a transaction depending on payment system.

The legal and behavioral constraints on merchants' pricing result in inadequate cost signaling to consumers, who therefore overuse of the more expensive payment system—credit. This in turn has several deleterious effects on the entire economy. Overconsumption of credit has exerts inflationary pressure on the economy as it expands the pool of money available for purchasing, but also raises prices because of the higher cost to merchants of credit transactions. Overconsumption of credit can lead to lower rates of ^{savings}^{footnote⁵⁴} and is a major factor in the rising rate of consumer ^{bankruptcy}^{footnote⁵⁵} Moreover, allowing pricing constraints equalize costs to consumers between payment systems, which results in the subsidization of credit consumers by

^{footnote⁵³} S. Rep., *supra*, note 45, at 11-12.

^{footnote⁵⁴} See CREDIT CARD NATION, *supra*, note 17.

^{footnote⁵⁵} See THE FRAGILE MIDDLE CLASS, *supra*, note 18.

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non-credit consumers.⁵⁶ This in turn drives more consumers to credit purchases, thus resulting in an effective subsidy for the credit card industry. 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.⁵⁷

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.⁵⁸ “Make no mistake

⁵⁶ See William C. Dunkelberg and Robert H. Smiley, *Subsidies in the Use of Revolving Credit*, available at <http://www.msb.edu/prog/crc/pdf/reprint3.pdf>, at 3. Originally published in MONEY, CREDIT AND BANKING, 469 (1975).

⁵⁷ The Committee Report acknowledged that there had been testimony that surcharge and discount restrictions force cash consumers were subsidizing 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, note 37, *supra*.

⁵⁸ See S. REP. NO. 97-23, at 8-9 (1981). The remarks of Senator Proxmire were as apropos to the political situation in 1981 as to today’s, if one were merely to substitute “Iraq” for “El Salvador.” His remarks are unusual for the Congressional Record for their gusto:

I am especially happy to see that the majority party in the Senate [the Republicans] has taken the lead in opposing unnecessary government regulation of business...Which brings us to the delicious irony of S. 414 [the Senate version of the Cash Discount Act]. There we have the spectacle of our fine new majority ramming through a bill calling for increased restriction of the free enterprise system as the first order of business of the Senate Banking Committee...Let us not forget that our number one problem today is inflation! Not El Salvador, not Afghanistan, not Iran, but an inflated, high interest rate economy that has been teetering on the brink of real trouble for a long time and will continue to teeter, until we can bring inflation under control. So what is our first action? To adopt a policy to encourage credit and discourage cash purchases. If this country could get off the credit kick—not just the Federal Government which is certainly the biggest offender...but the private sector, too...can anyone doubt that our conduct as a Nation will be less inflationary?

Id., at 8 (1981). While inflation is no longer a major concern in the U.S. economy, growing consumer debt burden has must the same effect as inflation vis-à-vis limiting the consumers actual purchasing power, if the debt is serviced. Decreased purchasing power has a contracting effect on the US economy, which leads to a decline in market value of US Treasury Bonds, making it harder for the government to raise the money it needs to service its own debt.

If the debt is not serviced, the consumer’s purchasing power will not be diminished in the short run, but there will be a credit default, which will impact not only the debtor’s future prospects of

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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.”^{footnote⁵⁹} Senator Proxmire also noted that the real forced subsidization was of credit card *companies*, not credit card consumers, by cash consumers,^{footnote⁶⁰} 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.*

While Congress focused on whether to permit surcharges and discounts itself, 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.

II. The Current Legal Background

Today, federal law no longer bans credit surcharges, but continues to prohibit state and private restrictions on cash discounts,⁶² while permitting state and private restrictions on credit surcharges, in spite of their economic equivalence. Allowing the federal credit surcharge ban to obtaining credit, but also the well-being of all of the debtor’s creditors, and have a potential domino effect of defaults,

^{footnote⁵⁹} *Id.*, at 8.

^{footnote⁶⁰} *Id.*, at 8-9.

^{footnote⁶¹} *Id.*, at 9. (emphasis added).

^{footnote⁶²} See 15 U.S.C. § 1666f (2004).

lapse was only a partial correction to an unnecessary economic restraint, as state and private law still restrict credit surcharges. Ten states ^{footnote⁶³} prohibit most surcharges on use of credit^{footnote⁶⁴}, while Minnesota caps surcharges at an arbitrary five percent^{footnote⁶⁵}. More 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

^{footnote⁶³} The implications of state restrictions for interstate credit transactions are not clear. 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.

^{footnote⁶⁴} See CAL. CIV. CODE § 1748.1(a) (Deering 2004); COLO. REV. STAT. § 5-2-212(1) (2004); CONN. GEN. STAT. § 42-133ff(a) (2003); FL. STAT. § 501.0117 (2004); KAN. STAT. ANN. § 16a-2-403 (2003); MASS. GEN. LAWS Ch. 140D, § 28A; ME. REV. STAT. § 8-103.1.E, § 8-303.2 (2003); N.Y. GEN. BUS. LAW § 518 (2004); 14A OKL. ST. § 2-417 (2004); TEX. FIN. CODE § 339.001 (2004). See Kitch, *supra*, note 23, at 229, n. 23 for history of state surcharge prohibitions until 1990.

^{footnote⁶⁵} MINN. STAT. § 325G.051 (2003). Nothing in federal law prohibits states, as opposed to card issuers, from restricting cash discounts, but no states has 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); FL. STAT. § 501.0117 (2004); ME. REV. STAT. § 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. REV. STAT. § 8-103.1.E, § 8-303.1 (2003); REV. CODE WASH. § 19.52.130 (2004).

Notably, the states that do restrict credit surcharges have also made a variety of exceptions for government agencies, see FLA. STAT. § 215.322 (2004); 1987 Tex. A.G. Lexis 105 (July 15, 1987), public utilities, see 2003 ME. P.U.C. LEXIS 455 (Nov. 4, 2003), *but see* 2000 CONN. P.U.C. LEXIS 363 (Nov. 22, 2000) (Connecticut anti-surcharge statute applies to public utilities), and donations or membership dues to religious organizations, see 1996 TEX. A.G. LEXIS 21 (Feb. 29, 1996), as well as limiting the restriction only to sales of goods, see, 1987 TEX. A.G. LEXIS 105 (July 15, 1987). These exceptions make less sense than the surcharge prohibition, unless one sees them as an implicit acknowledgement that when the government plays the role of a merchant, it too does not want to be stuck with any of the transaction costs of credit.

The cost of accepting credit transactions has been recognized by other states. Four states that do not prohibit surcharges have specifically authorized various governmental and quasi-state actors to charge credit surcharges. See ALA. CODE § 41-1-60(e) (2004) (state and local governments may impose a credit surcharge); ALA. CODE § 11-47-25(h) (2004) (municipalities may impose a credit surcharge); GA. CODE ANN. § 50-1-6(e) (2004) (state and local government units may impose a credit surcharge); NEB. REV. STAT. § 81-118.01(6) (2004) (state agencies may impose a surcharge of no more than cost of credit transaction); N.C. GEN. STAT. § 159-32.1 (2004) (local governments, public hospitals, public authorities may impose a credit surcharge). Illinois, in contrast, has specifically authorized local government units to enter into arrangements with financial institutions for accepting credits with a “discount fee” (a percentage of the sale kicked-back) “whenever the governing body of the entity determines that any reduction of revenue resulting from the discount or processing fee will be in the best interest of the entity.” (Presumably through processing efficiency savings.) 50 ILL. COMP. STAT. 345/20(c) (2004).

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transaction.⁶⁶ They also prohibit merchants from charging different prices between cards or card brands.⁶⁷ Indeed, no-surcharge rules effectively prevent consumers from distinguishing between brands based on cost, thus protecting the credit card industry from internal price-wars.⁶⁸ 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 costs to consumers and give them the information necessary for making efficient payment consumption decisions.

Not all credit cards have no-surcharge rules. Open network cards such as MasterCard⁶⁹ and Visa⁷⁰ have no-surcharge rules, as does Discover,⁷¹ a closed network card. American

⁶⁶ Robert M. Hunt, *An Introduction to the Economics of Payment Card Networks*, Working Paper No. 03-10, at 3, Federal Reserve Bank of Philadelphia, June, 2003.

⁶⁷ *Id.*

⁶⁸ Frankel, *supra*, note 15, at 345.

⁶⁹ MasterCard International, MERCHANT RULES MANUAL (July 2004), at 44, BYLAW 9.12.2 (April 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 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.”); *id.* at 158, MAESTRO GLOBAL RULES 7.2.1 (March 2004) (“Unless permitted by local laws or regulations, Acquirers must ensure that their Merchants do not require Cardholders to pay a surcharge or any part of any Merchant discount, or any contemporaneous finance charge in connection with a Transaction. A Merchant may provide a discount fee to its customers for cash payments.”).

One wonders whether MasterCard could enforce such a provision, given that it is unintelligible in economic terms—one cannot prohibit a surcharge and allow a discount when they are tantamount economically to the same thing. Whether an arbitrator would come to such a conclusion, however, is another matter.

⁷⁰ See VISA, MERCHANT SERVICES MANUAL, at 37, available at http://www.moneris.com/downloads/manuals/visa_manual_eng.pdf. (“Can I charge my customer a fee for using their Visa card or INTERACdebit 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.”)

⁷¹ See Discover Network, DISCOVER NETWORK MERCHANT OPERATING RULES, RULE 3.1 (Revised October, 2004), available at http://www.discoverbiz.com/common/images/operat_reg.pdf. (“Unless

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Express, however, a closed network card does not, although 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.⁷²

Open and closed networks use no-surcharge rules for different purposes. Open networks 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.⁷³ 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.⁷⁴ The merchant will then divide the increased cost of credit transactions through reduced profits and increased prices. This increases the relative price of non-credit payment systems vis-à-vis credit, which leads to increased credit card usage.⁷⁵ 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. The more consumers that use credit cards, the more that are likely to become revolving accounts, paying high interest rates and fees.

^{footnote71} continued otherwise agreed upon by us in writing, you may not impose any surcharge, levy or fee of any kind for any transaction where a Cardmember desires to use a Card for any purchase of goods or services.”). One internet source, however, claims that Discover does not have a no-surcharge rule. See The Credit Report Site at http://www.thecreditreportsite.com/credit_cards.asp. It is possible that Discover has recently changed policy on surcharges.

^{footnote72} See American Express, Terms and Conditions for American Express Card Acceptance (Revised January 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.”).

^{footnote73} See Frankel, *supra*, note 15 at 343.

^{footnote74} For excellent illustrations of credit card payment systems, see Hunt, *supra*, note 66 at Figure 1, and Visa’s “How It Works” webpage, at http://usa.visa.com/business/accepting_visa/getting_started/how_it_works.html?it=12/business/accepting_visa/getting_started/index%2Ehtml|How%20It%20Works#anchor_3.

^{footnote75} See Frankel, *supra*, note 15 at 343.

Closed networks do not have interchange fees, though, so surcharge restrictions are of little importance to them in terms of increasing use of their particular card. Nevertheless, they benefit from surcharge restrictions both 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 issues as interchangeable.⁷⁶ No-surcharge rules protect precisely that interchangeability to consumers, especially those consumers who pay their cards in full and on time (and those who do not are probably less likely to pay attention to comparative interest rates and fees between cards). Because merchants cannot price 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. No-surcharge rules thus also insulate the credit card industry from internal rate competition.⁷⁷

On these grounds, some economists have questioned whether banning no-surcharge rules would actually lead to optimal levels of credit usage. Australian 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.⁷⁸ 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

⁷⁶ See *supra*, text accompanying note 68.

⁷⁷ See Kitch, *supra*, note 23, at 225; see also U.S. Sen. Subcommittee on Consumer Affairs of the Committee on Banking, Housing, and Urban Affairs, *Hearings on Cash Discount Act, S. 414*, 97th Cong. 1st Session (1981) (testimony of Paul Gerwitz, representing the Consumers Union).

⁷⁸ Joshua S. Gans and Stephen P. King, *Regulating Interchange Fees in Payment Systems*, working paper, available at <http://ssrn.com/abstract=286535> at 6.

Available at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=673022

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.”^{footnote⁷⁹} Consumers do not choose according to costs and benefits, but only according to 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,^{footnote⁸⁰} rather than asking what is the efficient level of usage of different payment systems. Thus, a New Zealand 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 cardholders. The result will be too few cardholders and too little card usage.”^{footnote⁸¹}

Wright’s concern for victimized credit card companies is both amusing and astounding. His analysis, however, like all of the economic analyses of surcharging, however, have assumed rational, efficiency-maximizing actors. But in a world in which consumers (and merchants) are not indifferent as between the bottle half-full and the bottle half-empty, the distinction between surcharges and discounts is tremendous. Moreover, merchants’ acceptance of credit cards is not solely from transactional benefits,^{footnote⁸²} but from the hope that this will increase business generally.^{footnote⁸³} There is a major disconnect between the sophisticated economic modeling based on the assumption of rational consumers and merchants and the reality of consumer and merchant

^{footnote⁷⁹} *Id.* at 16.

^{footnote⁸⁰} See Jean-Charles Rochet and Jean Tirole, *Cooperation Among Competitors: Some Economics of Payment Card Associations*, 33 RAND J. ECON. 549 (2002).

^{footnote⁸¹} Julian Wright, *Optimal Card Payment Systems*, working paper, available at <http://ssrn.com/abstract=278047> at 3.

^{footnote⁸²} *Id.* at 4.

^{footnote⁸³} See *infra* sections IX and XI. B.

behavior. Thus, Robert M. Hunt of the Federal Reserve Bank of Philadelphia has argued that permitting merchant surcharges will blunt the effect of raised interchange fees by credit card networks to stimulate credit card ^{usage.footnote⁸⁴} 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.footnote⁸⁵} 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 to then 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.footnote⁸⁶} Hunt sees this as resulting in an underutilization of payment ^{cards.footnote⁸⁷} This concern seems misplaced. The scenario laid out by Hunt only results in card holders being forced to internalize the costs of the payment system, not just the ^{benefits.footnote⁸⁸} 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. Nor can credit purchases be priced

^{footnote⁸⁴} Hunt, *supra*, note 66 at 9. Hunt's criticism draws on Joshua S. Gans and Steven P. King, *The Neutrality of Interchange Fees in Payment Systems*, mimeo, University of Melbourne (2001), published as Joshua S. Gans and Steven P. King, *The Neutrality of Interchange Fees in Payment Systems*, 3 TOPICS IN ECON. ANALYSIS & POL'Y, 1 (2003), available at <http://www.bepress.com/bejeap/topics/vol3/iss1/art1>.

^{footnote⁸⁵} See Hunt, *supra*, note 66 at 9. Cf. Sujit Chakravorti and 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).

^{footnote⁸⁶} See Hunt, *supra*, note 66 at 9.

^{footnote⁸⁷} See *id.*

^{footnote⁸⁸} 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.*, note 20 (citing Joshua S. Gans & Steven P. King, *Approaches to Regulating Interchange Fees in Payment Systems*, mimeo, University of Melbourne (2003).)

differently from any noncash purchases.^{footnote⁸⁹} Private agreements, state, and federal law, when combined with 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 overconsumption 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.

III. Costs of Payment Systems

Precise comparisons of the costs of different payment systems to merchants are difficult for a number of reasons. Costs change from year to year as new technologies develop and efficiencies are discovered. The costs come from a number of different parties—clearinghouses, brands, issuers, merchants' banks, and gateway operators, among others. Some costs involved relate to percentage of sale price, while some are flat per transaction fees, some are flat monthly fees, some are initial set-up costs.^{footnote⁹⁰} Accordingly, costs vary with the size and volume of transactions. Moreover, the costs of debit and credit transactions vary among card issuer, brand

^{footnote⁸⁹} See, e.g., notes 69 - 72, *supra*. 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 14A OKL. ST. §2-417 (2004). My research has not uncovered any reported cases or agency opinion letter from any state 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.

^{footnote⁹⁰} For estimates of the variety of costs to the merchant for credit card transactions, see <http://www.wilsonweb.com/articles/merch-cc.htm>. See also <http://www.infomerchant.net/creditcardprocessing/prices/pos-terminal-prices.html>.

(e.g., 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 bank, and also depends on the merchant’s credit risk, but is usually in a range of 1.5% to 5% of sale’s price.⁹¹ 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 1-6 in Appendix and accompanying graphs.) 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.⁹² On-line (PIN) debit cards are cheaper yet, but checks are still the cheapest form of tender for merchants to accept other than cash.⁹³ (See Chart 1, below.) In spite of this, consumers generally pay the same price per transaction, regardless of payment system.

⁹¹ See <http://www.infomerchant.net/creditcardprocessing/prices/pos-terminal-prices.html>. Kitch, *supra*, note 23, at 219, notes that discount rates “were once as high as seven percent; they are now often below two percent.” Interestingly, some credit cards now also charge card holders 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.

⁹² The most comprehensive study appears to be one of the costs of payment systems for supermarkets conducted by Price Waterhouse Coopers for the Food Marketing Institute. The study found that “The 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*, February 9, 2001 at <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

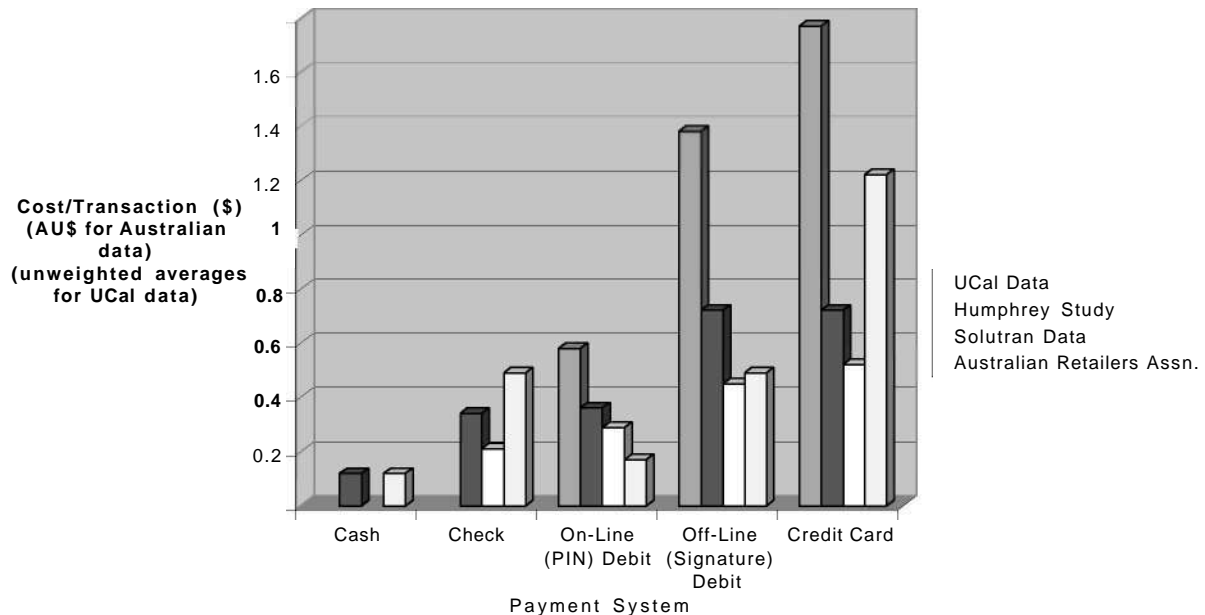
^{footnote92} continued credit card, while on-line debit transactions use a PIN for security verification. On-line debit transactions are significantly faster for consumers than off-line transactions. See Food Marketing Institute, *Should I Press Debit or Credit? It Does Make a Difference. A Consumer Brochure* (2004), available at 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 “The fees can be as high as 1.2 percent of the transaction amount, which effectively wipes out the grocer’s profit.” Food Marketing Institute, *News Release*, February 9, 2001 at <http://www.fmi.org/media/mediatext.cfm?id=289>.

^{footnote93} See Graph 1, *infra* and Tables 1-4 in Appendix.

Chart 1.

Cost per Transaction to Merchant by Payment System



(See Appendix for original source data, unweighted.)

IV. 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 does, the buyer will never know what the costs total on any particular transaction, as the buyer 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 she desires. If a merchant accepts credit cards, then she has but two options with the costs of payment. Either she can absorb the cost, thus reducing her profit margin, or she can pass it on to the buyer, in whole or in part. As the percentage of sales that are 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 cost to the buyer is not

risk free for the merchant, though, as higher prices will decrease the number of sales, all things being equal.

In spite of this conundrum, most merchants accept credit cards, as the cards also have benefits that typically outweigh the costs and lost sales for all but merchants with the smallest of profit margins. By accepting payment on credit cards, the merchant is likely to benefit, according to Visa and MasterCard, from: increased sales because “Consumers spend more when they’re not constrained by cash on hand”^{footnote94}; 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^{footnote95}. Merchants also are able to substitute the credit risk of a customer with the credit risk of the credit card network. If the customer does not pay his card issuer, the merchant still gets paid, unlike with a bounced check. 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 and do not pass it on entirely to consumers^{footnote96}. 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^{footnote97}. Non-credit consumers typically

footnote94 Accepting MasterCard, at http://www.mastercardmerchant.com/accept_mastercard/benefits.html.

footnote95 See *id.* See also http://usa.visa.com/business/accepting_visa/qsr/qsr_benefits.html?it=search.

footnote96 See section V. Subsidization: Level 1, *infra*.

footnote97 section V. Subsidization: Level 1, *infra*.

end up bearing a part of the costs of credit transactions when a merchant offers unified pricing for all payment systems.

V. Buyer's 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"), gains a cushion to his cash-flow, the convenience of having an easily transportable and readily accepted means of payment, gets a 20-30 day grace period in which to identify disputed charges while retaining the disputed funds, and receives significant legal protections.^{footnote⁸} Credit consumption also allows consumers to spend beyond what they 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 (known as a "deadbeat"), the time value of money extended is quite small. 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

^{footnote⁸} See note 11, *supra*, 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 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).

benefit of credit, is the greatest factor in the decision to make a credit purchase.⁹⁹ 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. 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 unbundled 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 without being aware of the cost of the system. The signal that consumers understand is point-of-sale pricing.¹⁰⁰ If consumers knew the price of payment, there would be less demand for credit, which would then exert market force for a lowering of the cost of credit, both in transactions, and in finance, as these two services are bundled in credit cards.¹⁰¹ As the Federal Reserve Board has just undertaken its first ever comprehensive review of Regulation

⁹⁹ Kenneth A. Carow and Michale E. Staten, *Debit, Credit, or Cash: Survey Evidence on Gasoline Purchases*, 51 J. OF ECON. & BUS. 409, 412-13, 420 (1999).

¹⁰⁰ Delayed charge that appear only on a monthly statement and are not apparent at point-of-sale, like many A T M fees do not have the same effect on consumer decisions as charges presented at point-of-sale, when the consumption decision is made.

¹⁰¹ See Bar-Gill, *supra*, note 16, at 1381. See also Barron et al., *supra*, note 52.

Zinn¹⁰² 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.^{footnote 103, footnote 104}

VI. Subsidization: Level 1

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.^{footnote 105} 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.^{footnote 106} At its peak, in 1989, 34% of U.S. gasoline retailers had cash discounts.^{footnote 107} 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 vs. full-service, presence of a repair or convenience facility, and number of nearby stations. While the choice of offering unified or two-tiered pricing was influenced in part by the cost of credit transaction to each gasoline franchise, the data analysis resulted in T-statistics of well over 2.00 in both surveys.¹⁰⁸ The results were similar: the price charged to all consumers in

^{footnote 102} 12 C.F.R. § 226..

^{footnote 103} See Fed. Res. Bd. of Governors, *Press Release*, Dec. 3, 2004, available at <http://www.federalreserve.gov/boarddocs/press/bcreg/2004/20041203/default.htm>.

^{footnote 104} See *infra*, section XI.E. for further discussion of the FRB's review of Regulation Z.

^{footnote 105} See Barron et al., *supra*, note 52. This working paper was later published in a reduced form, albeit with identical conclusions, under the same title. See John M. Barron, Michael E. Staten, & John Umbeck, *Discounts for Cash in Retail Gasoline Marketing*, 10 CONTEMP. ECON. ISSUES 89 (1992). Except when noted, my discussion refers to the data presented in the original working paper version.

^{footnote 106} See *id.*, at 16.

^{footnote 107} See *id.*, at 3.

^{footnote 108} See *id.*, at 17-18.

Available at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=673022

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 two-tiered pricing was 2.37¢/gallon higher than at stations with unified pricing, while customers taking advantage of the cash discount with two-tiered pricing paid 1.82¢/gallon less than at stations that had unified pricing.¹⁰⁹ In other words, the average cash discount, and thus the marginal cost of a credit transaction over a cash transaction, was 4.19¢/gallon.

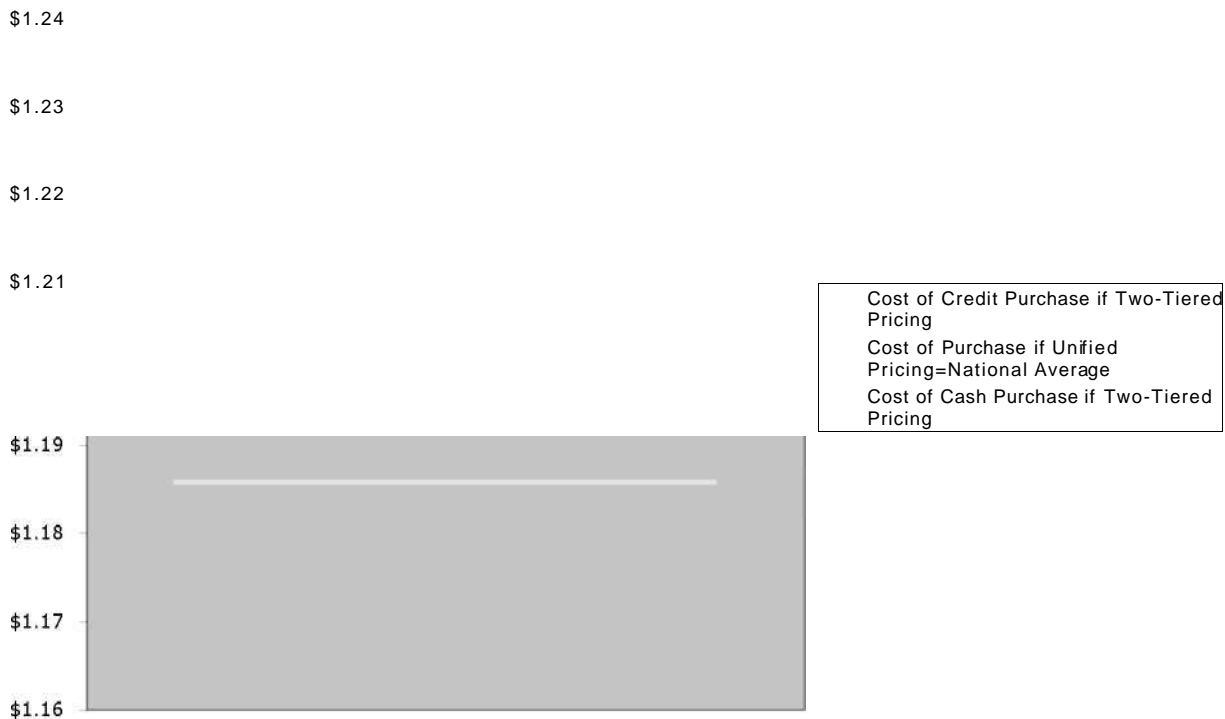
At stations with a unified pricing system, 2.37¢/gallon of the 4.19¢/gallon or 57% of the marginal cost was absorbed by the merchant, thus subsidizing the credit consumer. The additional 1.82¢/gallon or 43% of the marginal cost was passed on to cash customers to offset the merchant's subsidization of 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/gallon,¹¹⁰ paid an extra 1.82¢/gallon so the merchant could subsidize the credit customers 2.37¢/gallon.¹¹¹

¹⁰⁹ See Barron et al., *supra*, note 52, at 18. See also John M. Barron, Michael E. Staten, & John Umbeck, *Discounts for Cash in Retail Gasoline Marketing*, 10 CONTEMP. ECON. ISSUES 89, 102 (1992).

¹¹⁰ Historical national average gasoline price data file in Excel format available for download at <http://www.eia.doe.gov/emeu/steo/pub/fsheets/RealMogasPrices.html>.

¹¹¹ See John M. Barron, Michael E. Staten, & John Umbeck, *Discounts for Cash in Retail Gasoline Marketing*, 10 CONTEMP. ECON. ISSUES 89, 102 (1992).

Retail Gasoline Pricing in Delaware, 1983



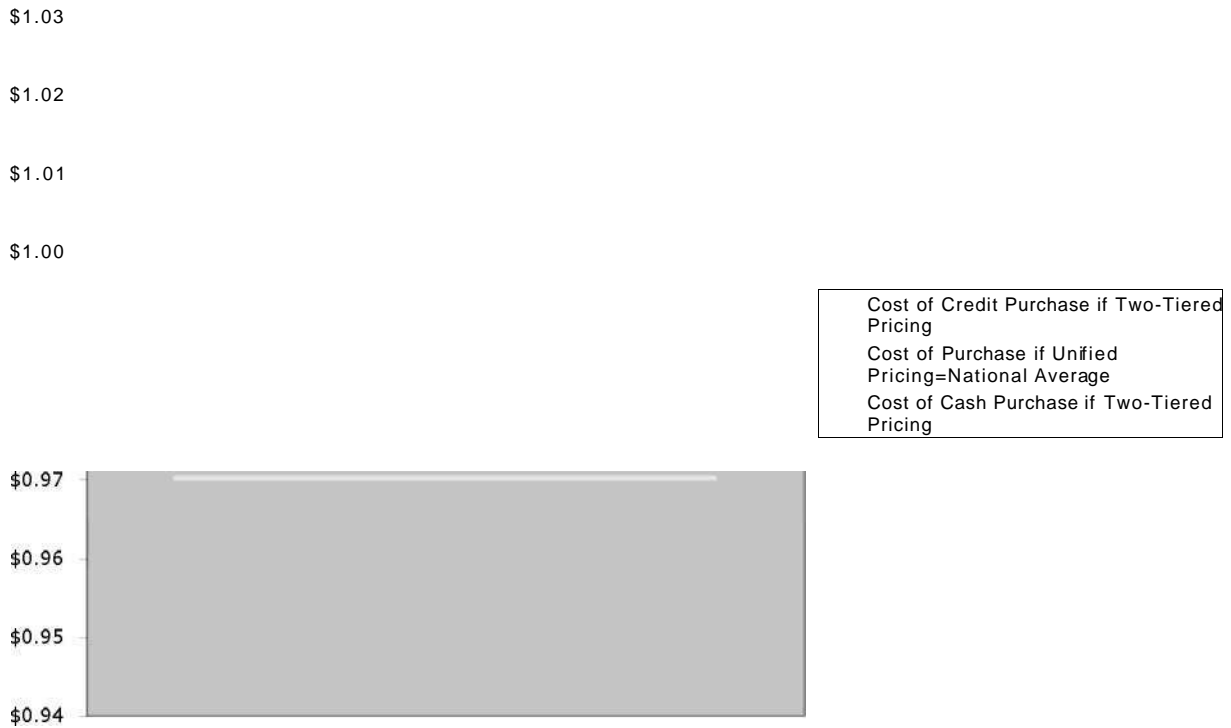
In Washington State in 1989, the base price for credit customers at stations with two-tiered pricing was 3.38¢/gallon higher than at stations with unified pricing, while customers taking advantage of the cash discount with two-tiered pricing paid 1.48¢/gallon less than at stations that had unified pricing.¹¹² In other words, the average cash discount, and thus the marginal cost of a credit transaction over a cash transaction, was 4.86¢/gallon.

At stations with a unified pricing system, 3.38¢/gallon of the 4.86¢/gallon or 70% of the marginal cost was absorbed by the merchant, thus subsidizing the credit consumer. The additional 1.48¢/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

¹¹² See *id.*, at 18. See also John M. Barron, Michael E. Staten, & John Umbeck, *Discounts for Cash in Retail Gasoline Marketing*, 10 CONTEMP. ECON. ISSUES 89, 102 (1992).

98.5¢/gallon, footnote¹¹³ paid an extra 1.48¢/gallon or so that the merchant could subsidize the credit customers 3.38¢/gallon, footnote¹¹⁴

Retail Gasoline Pricing, Washington, 1989



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

footnote¹¹³ See note 110, *supra*.

footnote¹¹⁴ See John M. Barron, Michael E. Staten, & John Umbeck, *Discounts for Cash in Retail Gasoline Marketing*, 10 CONTEMP. ECON. ISSUES 89, 102 (1992).

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 merchants for using credit.

VII. Subsidization: Level 2

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 overconsumption of credit cards as a payment system, which itself amounts to a subsidy for the credit card industry, because the more credit consumers exist, the more that are likely to become lucrative revolving accounts that pay interest, rather than enjoying the time-value of money of the ^{float}^{footnote}¹⁵. 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.

VIII. Social Costs of Overconsumption of Credit

A full exploration of the social costs of the overconsumption of credit is beyond the scope of this paper and has been amply examined ^{elsewhere}^{footnote}¹⁶. Consumers routinely underestimate their ability to pay off credit card loans. 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 with higher default interest rates can become an inescapable quagmire.

^{footnote}¹⁵ 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 (2002) (Table 2).

^{footnote}¹⁶ See, e.g., FRAGILE MIDDLE CLASS, *supra*, note 17; CREDIT CARD NATION, *supra*, note 18; Bar-Gill, *supra* note 16; ELIZABETH WARREN & AMELIA WARREN TYAGI, THE TWO-INCOME TRAP: WHY MIDDLE-CLASS MOTHERS AND FATHERS ARE GOING BROKE (2003).

Consumers who are unable to service their debt are forced into painful cutbacks in their general consumption habits, 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 get a return of only cents on the dollar. This in turn can have a domino effect of other bankruptcies. To the extent that this increases public reliance on welfare, social security, and Medicaid, the costs are born by all taxpayers, as we are our brothers' keepers of last resort.

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 they are more likely to make cash purchases than ^{credit.footnote¹⁷} Poor, cash-only consumers are further hurt by having to pay higher prices to subsidize credit consumers.

Moreover, to the extent that market-produced goods and services rise in actual price to consumers faster than actual income increases, consumers purchase less. Instead, their “consumption decisions are distorted toward non-market goods” and services, such as leisure or home-cooked meals, whose “retail” prices remain ^{unaffected.footnote¹⁸} Similarly, cash-only consumers, in particular, have less purchasing power to the extent they are subsidizing credit

^{footnote¹⁷} As of around a decade ago, over 90% of families with annual income of over \$100,00 have at least one credit card, while only 25% percent of Americans with annual family income of under \$10,00 have a credit card. *Usage of General Purpose Credit Cards by Families: 1989 and 1992*, 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.

^{footnote¹⁸} Katz, *supra*, note 12, at 39.

consumers. And credit consumers with revolving balances—63% of credit card users and 50% of adult Americans^{footnote119}—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.^{footnote120} In short, debt service has the same effect as inflation on purchasing power. This hurts entire economy, as it lowers demand for goods and services. A stagnating American economy hurts U.S. Treasury bond prices, 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 be glib about the potential social costs of overconsumption of credit. Given the exponential growth rate of compounded interest, a small amount of excessive debt can become insurmountable in a very short time.

IX. 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 ^{outfootnote121} Yet, merchant behavior shows some sensitivity to the cost 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 agreements often contrary to state law. Indeed, when the fees are too high, vis-

^{footnote119} See CardTrak, (April 2004), at <http://new.cardweb.com/cardtrak/pastissues/april2004.html> (Frame 2 of graph).

^{footnote120} See Steve Lohr, *Maybe It's Not all Your Fault*, N.Y. Times, December 5, 2004, at D1.

^{footnote121} See Barron, et al., *supra*, note 52, at 3. See also Barron et al., *Discounts for Cash in Retail Gasoline Marketing*, 10 CONTEMP. ECON. ISSUES 89 (1992). Kitch, *supra*, note 23, at 230, notes 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.

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.^{footnote122} 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 Professor Paul Gerwitz, then an attorney for the Consumer’s Union, in his testimony to the Senate in 1975. According to Gerwitz, 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.^{footnote123} Other explanations offered are that regulatory barriers may make cash discounts relatively costlier and that merchants may fear a backlash from customers.^{footnote124} And merchants may see accepting credit cards as just another service, like parking or showrooms or helpful sales staff that consumers want and the seller can provide at lower cost than the consumer.^{footnote125}

Some more mundane reasons may also explain the general absence of cash discounts. Many merchants likely 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

^{footnote122} See PAYING WITH PLASTIC, *supra* note 1 at 169-72.

^{footnote123} See Kitch, *supra*, note 23, at 225. 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., 1975, at 17-18 (testimony of Paul Gerwitz).

^{footnote124} See Hunt, *supra*, note 66, at 10.

^{footnote125} See Kitch, *supra*, note 23, at 223.

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 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 the infrequent occurrence of two-tiered pricing, either by surcharge or by discount, when allowed.^{footnote¹²⁶} In 2003, Australia banned surcharge restrictions and since then a wide-range of merchants have begun to institute two-tiered pricing.^{footnote¹²⁷} Sweden and the Netherlands both banned no-surcharge

^{footnote¹²⁶} 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, 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.

^{footnote¹²⁷} The Reserve Bank of Australia's regulations allow merchants to surcharge up to the additional cost of the credit transaction. See THE NILSON REPORT, Number 771 (Sept. 2002), 1, 5. 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, at <http://au.pfinance.yahoo.com/041013/1/bk9.html>. I have found references to credit surcharging in Australia by the Telstra telecom company, see <http://www.abc.net.au/am/content/2004/s1098227.htm> by Qantas and Virgin Blue Airlines, see Qantas, *Qantas Statement on Credit Card Surcharge*, February 9, 2003, at <http://www.qantas.com.au/regions/dyn/au/publicaffairs/details?ArticleID=2003/feb03/2875> and Virgin Blue, *Fees and Surcharges*, at <http://www.virginblue.com.au/bookings/fees/>. The Aldi supermarket chain, which had previously refused to accept credit cards, has also begun surcharging for credit card purchases. See http://www.paymentsnews.com/2004/09/australia_aldi_.html.

If merchants did take advantage of two-tiered pricing, it would give them additional negotiating leverage with their acquirer banks to lower discount rates and fees. Whether merchants would press this

rules in the 1990s. In the Netherlands in 2000, ten percent of retailers had credit surcharges and nine percent offered discounts for other payment systems.^{footnote128} But of the retailers who knew that surcharges were allowed, eighteen percent had instituted them.^{footnote129} In Sweden in 2000, only five percent of retailers imposed surcharges on MasterCard or Visa.^{footnote130} but Swedish law only prohibits card networks from banning surcharges; acquirer banks can still impose no-surcharge rules and most of them do.^{footnote131}

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) explain that the decision is primarily due to: their estimated 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%).^{footnote132} Almost no merchants in Sweden offer a cash discount.^{footnote133} Those who do not discount explain that the main reasons for not doing so are: a desire not to differentiate between customers due to 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%).^{footnote134} My own experience with Harvard Square merchants is that they do not offer a discount because “it is store policy.” When pressed for an explanation of

^{footnote127} continued leverage is an uncertain matter. Empirical data on the effect of the regulatory change on merchant discount rates in Australia would be extremely telling of the importance of the surcharge restrictions.

^{footnote128} See ITM Research, *supra*, note 50, at 8-9; Katz, *supra*, note 12, at 50.

^{footnote129} Katz, *supra*, note 12, at 50.

^{footnote130} IMA Market Development AB, *Study Regarding the Effects of the Abolition of the Non-Discrimination Rule in Sweden*, at 18 (Feb. 2000).

^{footnote131} Katz, *supra*, note 12 at 50.

^{footnote132} IMA, *supra*, note 130, at 23.

^{footnote133} See *id.*, 24-25.

^{footnote134} *Id.*, at 26.

the policy, none is offered; the policy is apparently apodictic. Like the Swedish merchants who objected to surcharges as a “matter of principle,” Harvard Square merchants seem unable or unwilling to express a reason for their policy, but they evince a general discomfort with two-tiered pricing is evident.

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 on-line 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 merchant hesitancy about 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.

X. 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 to a consumer’s decision to take advantage of two-tiered pricing: constraints on cash-on-hand; relative ease of transaction size of the discount; size of the transaction; level of fraud/theft liability protection by payment system; and 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/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 US, credit cards also 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.

Data from the Swedish and Dutch 2000 surveys indicates that consumers are quite sensitive 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 refraining from paying with via credit when informed about a credit surcharge.^{footnote¹³⁵} In the Netherlands survey, merchants estimated that about 27% of the customers refrain from paying with credit cards when informed of a credit surcharge.^{footnote¹³⁶}

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

^{footnote137} *Id.*, at 18.

^{footnote136} See ITM Research, *supra*, note 50, at 8.

concluded that surcharges cause economically excessive use of credit cards^{footnote¹³⁷} 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.”^{footnote¹³⁸} Since 2003, there has been 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.^{footnote¹³⁹} 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 continued with unified pricing.^{footnote¹⁴⁰}

XI. 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 a change.

A. Major Card Network Incentives

The major credit card networks love no-surcharge rules because it channels consumers toward the sticky trap of compound interest. No-surcharge rules combine with the trickle down of interchange fees and discount rates to make credit relatively cheaper than other payment

^{footnote¹³⁷} Katz, *supra*, note 12, at 39.

^{footnote¹³⁸} *Id.*, at 8.

^{footnote¹³⁹} See CardTrak (July 2003) at <http://www.cardweb.com/cardtrak/news/2003/july/24a.html>.

^{footnote¹⁴⁰}

See *id.*

systems.footnote¹⁴¹ 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. The more consumers that use credit cards, the more will be likely to become the lucrative revolving accounts that make up nearly 90% of Visa and MasterCard's revenue.footnote¹⁴² 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. There is no incentive for the major credit card networks and their constituent members to abandon surcharge restrictions.

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 at all, which puts them at a disadvantage (or at least a perceived disadvantage) vis-à-vis merchants who accept credit cards.footnote¹⁴³ Merchants bear the costs of surcharge restrictions, to the extent that they subsidize credit consumers. These costs are offset to the extent to which non-credit consumers overpay for payment services and to the extent that relatively cheaper prices for credit consumers results in 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

footnote¹⁴¹ See discussion *supra*, Section II.

footnote¹⁴² See Mann, *supra*, note 115.

footnote¹⁴³ Reserve Bank of Australia, Standard on Merchant Pricing, *available at* http://www.rba.gov.au/PaymentsSystem/PaymentsPolicy/Reforms/CreditCardSchemes/standard_on_merchant_pricing_2002.html.

cash on ^{hand}footnote¹⁴⁴ Increased number of 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 "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."footnote¹⁴⁵ Indeed, one economic model predicts that unified pricing actually decreases number of transactions ^{total}footnote¹⁴⁶ The accuracy of the 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,footnote¹⁴⁷ and card networks vigorously promote acceptance of cards as a means of increasing sales.footnote¹⁴⁸ As long as merchants believe that accepting credit cards will increase their profits, they unlikely to push for changes to the no-surcharge restriction rules.

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

^{footnote}¹⁴⁴ Recently a woman named Antoinette Millard made national news by running up credit card bills in excess of \$1 million. *See Lohr, supra*, note 120.

^{footnote}¹⁴⁵ Board of Governors of the Federal Reserve System, *supra*, note 37, at 6.

^{footnote}¹⁴⁶ *See* Marius Schwartz & Daniel R. Vincent, "Same Price, Cash or Card: Vertical Control by Payment Networks," Working Paper, (February 2001).

^{footnote}¹⁴⁷ *See* Sujit Chakravorti & Alpa Shah, *Underlying Incentives in Credit Card Networks*, 48 ANTIRUST BULL. 53, 58 (2003).

^{footnote}¹⁴⁸ *See supra*, text accompanying notes 94 - 95.

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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.^{footnote¹⁴⁹}

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.^{footnote¹⁵⁰} ^{footnote¹⁵¹} 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.^{footnote¹⁵²} Economists Sujit Chakrovorti and William R. Emmons of the Chicago and St. Louis Federal Reserve Banks, respectively, 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.^{footnote¹⁵³} 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

^{footnote¹⁴⁹} See Carow and Staten, *Debit, Credit or Cash*, *supra* note 99, at 420.

^{footnote¹⁵⁰} 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.

^{footnote¹⁵¹} Frankel, *supra*, note 15, at 317-318, *et passim*, argues that credit cards costing at par with cash is an example of Gresham’s Law, the sixteenth century observation that “bad money drives out the good,” originally observing that clipped coins will displace unclipped coins from circulation when they circulate at the same value.

^{footnote¹⁵²} In 2004, 53% of all credit card offers included some type of rewards program, up from 45% in 2003 and 30% in 2002. See CardTrak (April 2004), at <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.*

^{footnote¹⁵³} See Chakravorti and Emmons, *supra* note 85, at 2.

subsidized by higher interest rates on revolvers or whether it is also paid for, at least in part, through higher interchange and merchant discount rates.

Be this as it may, affinity programs and bundled benefits obviously come at some cost, but consumers, especially those who use credit cards only for convenience and the float and pay off their balances in full and on time (“deadbeats” or “freeloaders”), 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. The cost of the bundled miles or rewards points is never directly revealed to the consumer. It is far easier for consumers to perceive the benefits of the payment systems than also to figure in the ^{costsfootnote¹⁵⁴}

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 inefficiency. 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 ^{banfootnote¹⁵⁵}. Since then, the issue has not arisen on a federal level. Neither merchant nor consumer groups have particularly

^{footnote¹⁵⁴} Accordingly, some critics have cogently proposed bans on affinity programs. *See, e.g.,* Ronald J. Mann, *Credit Card Policy in a Globalized World*, University of Texas School of Law Law and Economics Working Paper No. 018, February 2004, *available at* <http://ssrn.com/abstract=509063>, at 3 (proposing ban on affinity programs because they unduly incentivize credit card use).

^{footnote¹⁵⁵} *See* Kitch, *supra*, note 23, at 228.

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. State legislative or regulatory intervention might run afoul of federal preemption, especially from the Office of the Comptroller of the Currency or might have limited applicability only to card networks and acquirers based in-state. 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 it will be undertaking the first-ever comprehensive review of Regulation ~~Z~~^{Footnote¹⁵⁶} which implements TILA. The FRB's review of

footnote¹⁵⁶ 12 C.F.R. § 226.

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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.¹⁵⁷ The FRB is seeking to determine whether Regulation Z is achieving its purposes, among which is “to permit consumers to make informed decisions about the use of credit.”¹⁵⁸ In particular, the review aims to determine whether TILA’s mandatory disclosure schedules are getting “timely information to consumers in a readable form”¹⁵⁹ to promote comparison-shopping among open-ended lines-of-credit.¹⁶⁰

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.¹⁶¹ TILA

¹⁵⁷ Bd. of Governors of the Fed. Reserve Sys., Advanced Notice of Proposed Rule-Making, Docket No. R-1217 at <http://www.federalreserve.gov/boarddocs/press/bcreg/2004/20041203/attachment.pdf>, at 3. See *supra*, text accompanying notes 1 - 10.

¹⁵⁸ *Id.* at 4.

¹⁵⁹ *Id.* at 5.

¹⁶⁰ *Id.*

Id.

¹⁶¹ 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 weeks later.

What has happened with the TILA schedule itself? Chances are that the consumer did not read the schedule. Even if the consumer read it, the consumer did not understand it in any meaningful way, that it is unlikely that the consumer understands 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. The 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. Only the relative benefits of the payment methods, but not the costs will inform the consumer’s decision.

Should a consumer be conscientious enough to read the TILA disclosure schedule and fully understand it, it is still quite unlikely that the consumer will remember the information in it when making a decision about whether to purchase on credit and if so, using which line-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 application and extension of a line-of-credit. The first use of the line-of-credit might be some days late, and repeated use of the line of credit might last years into the future. The TILA is long forgotten and out of mind 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 an informative factor when the combined

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.^{footnote162} Since the consumer only sees the price tag 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.^{footnote163}

A better method for conveying information on 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.^{footnote164} Two-tiered point-of-sale pricing would serve as a warning label, like a death’s head on poison or a Surgeon General’s Warning on tobacco and alcohol products, and put consumers on

^{footnote161} continued 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 the 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.

^{footnote162} 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.

^{footnote163} See *supra* note 103.

^{footnote164} 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.

notice of the minimal costs they will have to internalize with a credit purchase.^{footnote¹⁶⁵} 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 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^{footnote¹⁶⁶} and banning the credit card networks’ market-restraining no-surcharge rules. Point-of-sale, market driven signaling would be far more effective than convoluted TILA-schedule disclosure by the regulated parties so far *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.^{footnote¹⁶⁷} TILA’s delegation of regulatory authority to the FRB most likely does not include the delegation of the ability to ban surcharge restrictions as the Cash Discount Act’s definition of discounts excludes surcharges, and Congress itself declined to ban surcharge restrictions in 1984. 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^{footnote¹⁶⁷} against no-surcharge rules.

F. Debit Card Issuer Incentives

The major credit card networks own most off-line debit cards and have little incentive to foster competition between their own products. Off-line debit has lower transaction costs, but it

^{footnote¹⁶⁵} See *supra* note 164.

^{footnote¹⁶⁶} See *supra* text accompanying notes 137 - 140.

^{footnote¹⁶⁷} See section XI.D., *supra*.

likely produces a smaller profit margin because it does not bring in lucrative revolving balance accounts paying compound interest.

On-line debit card networks, however, would gain a competitive edge on credit cards if merchants charged for payment at cost, as on-line debit is significantly cheaper than ^{credit.footnote¹⁶⁸}. Although, debit would become more expensive vis-à-vis cash or checks if merchants passed payment costs on to consumers, it appears that debit cards' main competition is credit cards, not cash and checks, as debit cards offer nearly the same conveniences as credit cards other than the ability to spend beyond current account holdings. Because no-surcharge rules force merchants to price on-line debit cards the same as off-line debit cards or credit cards, on-line debit card issuers' ability to compete with credit cards on the basis of cost is negated. 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

^{footnote¹⁶⁸} Indeed, arguably any writer of a check might have standing to sue, because of the disparate treatment of her negotiable instrument. If a consumer did have standing, arbitration provisions might stand in the consumers' way, but query whether the cardholder's agreement covers on claims between the cardholder and the issuer, not the cardholder and the network.

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purpose of their cards is to create brand loyalty.¹⁶⁹ Indeed, in-house retail card issuers have supported banning no-surcharge rules.¹⁷⁰ 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%.”¹⁷¹ The framing effect that has protected the major credit card networks until now would whipsaw them with full force.

XI. 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 success in related matters. In 1996, Wal-Mart and other retailers filed an anti-trust suit against MasterCard and Visa, challenging the card networks’ “honor all cards” rules as creating an anti-competitive tying situation.¹⁷² The “honor all cards” rule required that any merchant who accepted a MasterCard or Visa branded card had to accept all cards of those 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.¹⁷³ 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

¹⁶⁹ See generally Kenneth A. Carow and Michael E. Staten, *Plastic Choices: Consumer Usage of Bank Cards versus Proprietary Credit Cards*, 26 J. OF ECON. & FIN. 216 (2002), available at <http://www.msb.edu/prog/crc/pdf/R31.pdf>.

¹⁷⁰ See Kitch, *supra*, note 23, at 231.

¹⁷¹ See *id.*

¹⁷² For a clearinghouse of documents and information related to the suit and settlement see <http://www.inrevisacheck-mastermoneyantitrustlitigation.com/>.

¹⁷³ See *In re Visa Check/MasterMoney Antitrust Litig.*, 192 F.R.D. 68, 73 (E.D.N.Y. 2000).

costs to merchants.^{footnote174} 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.^{footnote175} The card networks paid Wal-Mart and the rest of the class \$3.05 billion and agreed to rescind the “honor all cards” rule.^{footnote176} While the Wal-Mart suit was not decided on its merits, the sizeable settlement and agreement to rescind the “honor all cards” rule indicates the strength of the case against the credit card networks.

At first glance, it would appear that a strong case could also be that the credit card networks violate anti-trust laws through no-surcharge rules. The combination of interchange fees and surcharges restrictions that impede merchants from passing on the cost of those fees to consumers are anticompetitive exercises of market power.^{footnote177} No-surcharge rules involve an anticompetitive business practice by an actor—the credit card networks—with major market force. The anticompetitive 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 anti-trust 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,^{footnote178} and even within the general payment

^{footnote174} See Table 4 in Appendix.

^{footnote175} See *In re Visa Check/MasterMoney Antitrust Litig.*, 297 F. Supp. 2d 503 (E.D.N.Y. 2003).

^{footnote176} See *id.*, at 508.

^{footnote177} See Frankel, *supra*, note 15 at 314.

^{footnote178} MasterCard and Visa alone accounted for over 75% of the dollar volume of credit card sales in 1999. See Chakravorti & Shah, *Underlying Incentives*, *supra*, note 147, at 54. There is a 95% overlap of

systems market it is formidable, as it includes both the credit and debit card brands of the major networks. 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 other forms of payment systems available.^{footnote 179} Second, the possibility of discounting instead of surcharging weakens any economic argument. 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 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, standing might be a problem. In the only federal case in which surcharge restrictions have been challenged, *The Tennessean Truckstop, Inc. v. NTS, Inc.* ^{footnote 180} the Sixth Circuit held that a truckstop lacked standing to sue a credit card system for enforcing its no-surcharge rules. Fifth, 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

^{footnote 178} continued identity between the banks that are members of the MasterCard joint venture network and the Visa joint venture network. See *In re Visa Check/MasterMoney Antitrust Litig.*, 280 F.3d 124, 129 (2d Cir. 2001).

^{footnote 179} 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 *National 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 anti-trust 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).

^{footnote 180} 875 F.2d 86, 87 (6th Cir. 1989).

restrictions on surcharges.”^{footnote 181} 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, 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 the cheaper payment system. An anti-trust suit victory for the in-house retail card or on-line debit card industry would have positive effects for the entire economy.

XIII. Conclusion

No-surcharge rules and state laws prohibiting credit card surcharges create an imbalance in the payment systems market resulting in the inefficient overuse of expensive payment systems like credit cards at the expense of other payment systems. This in turn results in higher prices for non-credit consumers in order for merchants to subsidize of credit consumers. It also has an inflationary effect on the economy and shifts American’s resources from the purchase of new goods and services to the servicing of credit card debt against compound 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.^{footnote 182} Unfortunately, neither card networks, nor merchants, nor consumers have much incentive to change the system. Despite of lacking any policy justification beyond enriching the credit card industry, no-surcharge rules and their deleterious economic and

^{footnote 181} Kitch, *supra*, note 23, at 228.

^{footnote 182} Comparison is of the 49% growth rate in April 2002, before the ban, and the 6% April 2003 growth rate after the ban. See CardTrak (July 2003), at <http://www.cardweb.com/cardtrak/news/2003/july/24a.html>.

social effects will continue, unless competing payment systems bring successful antitrust action, the Federal Reserve recognizes that point-of-sale pricing, rather than *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.

APPENDIX**Table 1.**

Cost of Tender for a Fortune 100 Retailer (differential increases for lockbox organizations):	
Payment Option	Cost of Tender
payment option Check	cost of tender \$0.21
payment option On-Line Debit Card (PIN)	cost of tender \$0.29
payment option Off-Line Debit Card	cost of tender \$0.45
payment option Credit Card	cost of tender \$0.52

Source: *Paper Vs. Plastic: be careful what you wish for*, Solutran Newsletter, Winter 2003, at <http://www.solutran.com/newsletter/winter2003.stm>.

Table 2.

Grocery Retailer Cost Estimates for Different Payment Instruments in 2000 for the US				
	Credit Card	Debit Card ⁸³	Check	Cash
Cost per transaction	credit card \$0.72	debit card \$0.34	check \$0.36	cash \$0.12
Cost per \$100 sales	credit card \$1.80	debit card \$0.80	check \$0.80	cash \$0.90

Source: David Humphrey, Magnus Willeson, Ted Lindblom, & Göran Bergendahl, *What does it Cost to Make a Payment?* 2 REV. OF NETWORK ECON., 159, 162 (2003) (Derived from Food Marketing Institute, *It All Adds Up—An Activity Based Cost Study of Retail Payments*, Washington, D. C. (2001)).

Table 3.

Retailer Payment Costs in US in 1996	
Payment Option	Cost of Tender
payment option Cash	cost of tender \$0.12
payment option Check	cost of tender \$0.34
payment option On-Line Debit Card (PIN)	cost of tender \$0.36
payment option Credit Card & Off-Line Debit Card (Signature)	cost of tender \$0.72

Source: David Humphrey, Magnus Willeson, Ted Lindblom, & Göran Bergendahl, *What does it Cost to Make a Payment?* 2 REV. OF NETWORK ECON., 159, 162 (2003) (Derived from Kirsten Wells, *Are Checks Overused?* FED. RES. BANK OF MINNEAPOLIS Q. REV., 20: 2-12 (1996)).

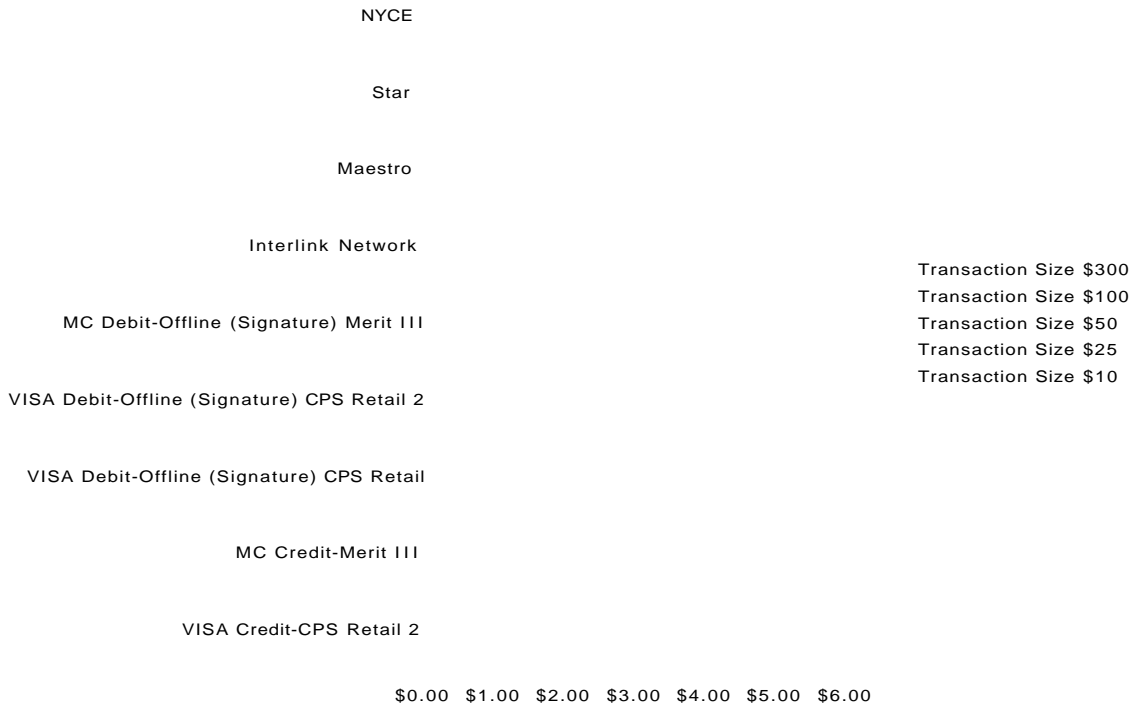
footnote¹⁸³ It is not clear if these figures include both on-line and off-line debit cards or if off-line debit cards are aggregated with credit cards.

Table 4.

Transaction Size	\$10	\$25	\$50	\$100	\$300
Credit	\$ Cost Per Transaction				
VISA Credit-CPS Retail 2	transaction size \$10/cost per trans \$0.37	transaction size \$25/cost per trans \$0.50	transaction size \$50/cost per trans \$0.60	transaction size \$100/cost per trans \$0.98	transaction size \$300/cost per trans \$4.78
MC Credit-Merit III	transaction size \$10/cost per trans \$0.29	transaction size \$25/cost per trans \$0.50	transaction size \$50/cost per trans \$0.67	transaction size \$100/cost per trans \$1.08	transaction size \$300/cost per trans \$5.17
Off-Line Debit	\$ Cost Per Transaction				
VISA Debit-Offline (Signature) CPS Retail	transaction size \$10/cost per trans \$0.53	transaction size \$25/cost per trans \$0.60	transaction size \$50/cost per trans \$0.89	transaction size \$100/cost per trans \$1.40	transaction size \$300/cost per trans \$3.75
VISA Debit-Offline (Signature) CPS Retail 2	transaction size \$10/cost per trans \$0.51	transaction size \$25/cost per trans \$0.56	transaction size \$50/cost per trans \$0.86	transaction size \$100/cost per trans \$1.30	transaction size \$300/cost per trans \$3.10
MC Debit-Offline (Signature) Merit III	transaction size \$10/cost per trans \$0.43	transaction size \$25/cost per trans \$0.60	transaction size \$50/cost per trans \$0.89	transaction size \$100/cost per trans \$1.40	transaction size \$300/cost per trans \$3.75
On-Line Debit	\$ Cost Per Transaction				
Interlink Network	transaction size \$10/cost per trans \$0.24	transaction size \$25/cost per trans \$0.51	transaction size \$50/cost per trans \$0.67	transaction size \$100/cost per trans \$0.86	transaction size \$300/cost per trans \$0.68
Maestro	transaction size \$10/cost per trans \$0.43	transaction size \$25/cost per trans \$0.53	transaction size \$50/cost per trans \$0.69	transaction size \$100/cost per trans \$0.70	transaction size \$300/cost per trans \$0.69
Star	transaction size \$10/cost per trans \$0.43	transaction size \$25/cost per trans \$0.53	transaction size \$50/cost per trans \$0.69	transaction size \$100/cost per trans \$0.69	transaction size \$300/cost per trans \$0.69
NYCE	transaction size \$10/cost per trans \$0.43	transaction size \$25/cost per trans \$0.52	transaction size \$50/cost per trans \$0.64	transaction size \$100/cost per trans \$0.64	transaction size \$300/cost per trans \$0.64

Source: Univ. of California, Office of the President, Banking Services Group, *Banking Services Newsletter*, March 2004, at <http://www.ucop.edu/finmgt/banking/BankingNewsletterMar04.pdf>.

Comparison of Credit and Debit System Cost



Source: Univ. of California, Office of the President, Banking Services Group, *Banking Services Newsletter*, March 2004, at <http://www.ucop.edu/finmgt/banking/BankingNewsletterMar04.pdf>.

Table 5. 1999 VISA USA Interchange Rates by Pricing Plan

Pricing Plan	Interchange Rate Percentage of Sale	Interchange Rate Flat Fee	Interchange Rate Applied to Purchase of:				
			\$10.00	\$50.00	\$100.00	\$500.00	\$1,000.00
CPS/Retail-Credit	interchange % of sale	0.05	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CPS/Retail 2-Credit (Emerging Markets)	interchange % of sale	0.05	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CPS/Hotel & Car Rental	interchange % of sale	0.05	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CPS/Card Not Present	interchange % of sale	0.05	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CPS/Automated Fuel Dispenser	interchange % of sale	0.05	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CPS/Supermarket-Credit	interchange % of sale	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CPS/Passenger Transport	interchange % of sale	0.05	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Express Payment Service	interchange % of sale	0.02	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Electronic Interchange Rate (EIRF)	interchange % of sale	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Retail Key Entry	interchange % of sale	0.05	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Standard (paper)	interchange % of sale	0.05	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
AVERAGE ALL CREDIT CARDS	interchange % of sale	0.07	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
AVERAGE ALL DEBITCARDS	interchange % of sale	0.17	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CPS/Retail-Check Card (off-line)	interchange % of sale	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CPS/Supermarket-Check Card (off-line)	interchange % of sale	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
AVERAGE OFF-LINE DEBIT	interchange % of sale	0.25	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
New Check Card-Retail (on-line)	interchange % of sale	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
New Check Card-Retail (on-line)	interchange % of sale	0.25	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
AVERAGE ON-LINE DEBIT	interchange % of sale	0.18	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Interlink/Supermarket	interchange % of sale	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Interlink/Non-Supermarket	interchange % of sale	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

Source: Pete Hisey, *How High Can You Go?* 11 CREDIT CARD MANAGEMENT, 105 (1999).

Application of VISA 1999 Interchange Rates						
Interchange Fee	\$10.00	\$50.00	\$100.00	\$500.00	\$1,000.00	
\$20.00						
\$18.00						
\$16.00						
\$14.00						
\$12.00						
\$10.00						
\$8.00				1		
\$6.00						
\$4.00					J	
\$2.00						
Average Credit	\$10.00	\$50.00	\$100.00	\$500.00	\$1,000.00	
Average Debit (All)						
Average Off-Line Debit						
Average On-Line Debit						

Source: Pete Hisey, *How High Can You Go?* 11 CREDIT CARD MANAGEMENT, 105 (1999).

Table 6. Costs to Australian Retailers by Payment System

Payment System	Cost/transaction to retailer (AU\$)	Percentage of Transaction Value
Cash	cost/transaction to retailer (AU\$) \$0.12	percentage of transaction value 0.70 %
Check	cost/transaction to retailer (AU\$) \$0.49	percentage of transaction value 1.40 %
Debit Card	cost/transaction to retailer (AU\$) \$0.17	percentage of transaction value 0.36 %
Bank-Issued Credit Card	cost/transaction to retailer (AU\$) \$1.04	percentage of transaction value 1.90 %
Non-Bank Issued Credit Card	cost/transaction to retailer (AU\$) \$2.01	percentage of transaction value 2.90 %

Source: The Australian Retailers Association, "Credit Card Schemes in Australia," Submission to the Reserve Bank of Australia," at 19-20, available at http://www.rba.gov.au/PaymentsSystem/PaymentsPolicy/Reforms/CreditCardSchemes/IIISubmissionsReceivedVolume1/H.2_a_0701.pdf.