

THE REVERSE-ROBIN-HOOD-CROSS-SUBSIDY
HYPOTHESIS: DO CREDIT CARD SYSTEMS TAX THE
POOR AND REWARD THE RICH?

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INTRODUCTION

Robin Hood and his band of merry men infamously, if apocryphally, robbed from the rich and gave to the poor.¹ Over the last decade, some economists have postulated that credit card companies do the opposite – forcing low-income cash customers to pay higher prices for retail goods that effectively fund the frequent flier miles and other rewards that go predominantly to affluent cardholders.² Because the credit card systems prohibit surcharging,³ everyone pays the same price. But, these analysts reason, merchants inflate their prices across the board to cover the cost of credit card acceptance.⁴ While credit card users are rewarded handsomely, the poor, who often use cash or checks, actually foot the bill for those rewards. In this sense, these commentators claim, card systems are reversing Robin Hood’s redistributive quest.

Until recently, this reverse-Robin-Hood-cross-subsidy (“RRHCS”) hypothesis was limited largely to theoretical economic analysis.⁵ Not any longer. Merchants have recently filed more than fifty, now consolidated, cases⁶ against the card systems alleging that “the No-Surcharge Rule

1. For a discussion of the historic origins of the Robin Hood legend, see Robin Hood: Fact or Fiction? Dialogue and Debate on the Robin Hood Legend, <http://www.robinhood.ltd.uk/robinhood/factorfiction.html> (last visited Feb. 27, 2009).

2. See *infra* Part II.

3. See, e.g., MASTERCARD WORLDWIDE, MASTERCARD RULES MANUAL § 5.9.2 (2008), available at http://www.mastercard.com/us/merchant/pdf/MasterCard_Rules_5_08.pdf; VISA U.S.A., INC., RULES FOR VISA MERCHANTS—CARD ACCEPTANCE AND CHARGEBACK MANAGEMENT GUIDELINES 10 (2007), available at http://usa.visa.com/download/business/accepting_visa/ops_risk_management/rules_for_visa_merchants.pdf.

4. See *infra* Part II.

5. The concept of a cross-subsidy refers to the flow of funds across customer types: from non-credit card users to consumers who make purchases with credit cards. Although both groups pay the same price, those who use cards receive rewards and other benefits not available to those who pay in cash or by check.

6. *In re* Payment Card Interchange Fee and Merch. Disc. Antitrust Litig., No. 05-MD-1720, 2008 WL 115104, at *1 (E.D.N.Y. Jan. 8, 2008) (affirming the magistrate judge’s

compels inequitable . . . subsidies, running from the least-affluent U.S. consumers to the most-affluent.”⁷ Because they cannot place the cost of card acceptance on those who use cards, the merchants allege,

[T]he No-Surcharge Rule effectively compels cash payers and users of other low-cost payment forms to subsidize all of the costly perquisites given by Issuing Banks to consumers using more expensive payment forms such as Visa and MasterCard Payment Cards, including frequent-flier miles, rental-car insurance, free gifts, and even cash-back rewards.⁸

The potential damages in these cases are said to exceed the annual pre-tax profit of the entire U.S. banking industry.⁹

In a recent article, Professor Adam Levitin supports the merchants’ allegations, claiming to “demonstrate[] empirically that credit card rewards programs are funded in part . . . by poor cash consumers.”¹⁰ Provocatively proclaiming that “food stamp recipients are subsidizing frequent flier miles,”¹¹ he proposed federal legislation that would overturn state laws¹² and credit card system rules¹³ that today prohibit retailers from surcharging credit card transactions.¹⁴

First, this Article questions the RRHCS hypothesis, providing reasons to doubt that credit card use actually increases retail prices in a substantial and systematic way. Although the best available evidence indicates that merchants pay more out-of-pocket to accept credit cards than they do for other forms of payment,¹⁵ these costs are only half the story. Credit cards provide significant benefits to merchants that could outweigh the incrementally higher out-of-pocket costs and thus lead to lower retail prices.

decision to dismiss certain damage claims and recognizing that more than fifty cases have been consolidated before the Judicial Panel on Multidistrict Litigation).

7. First Consol. Amended Class Action Compl. at ¶ 158, *In re Payment Card Interchange Fee and Merch. Disc. Antitrust Litig.*, 562 F. Supp. 2d 392 (E.D.N.Y. 2009) (No. 05-MD-1720).

8. *Id.*

9. Keith Reid, *Last resort: NACS joins lawsuit against Visa and MasterCard*, NAT’L PETROLEUM NEWS, Dec. 1, 2005.

10. Adam J. Levitin, *Priceless? The Social Costs of Credit Card Merchant Restraints*, 45 HARV. J. ON LEGIS. 1, 1 (2008) [hereinafter Levitin, *Social Costs*] (italics omitted).

11. *Id.* (italics omitted).

12. *Id.* at 9 n.35 (listing ten states that ban surcharging absolutely and others that have more limited restrictions).

13. *See infra* Part II.

14. Levitin, *Social Costs*, *supra* note 10, at 55-58.

15. *See infra* Part II.A.

Although the evidence is inconclusive, credit card acceptance appears to make all consumers better off than they would be if the particular merchants with whom they deal did not accept cards.¹⁶

Second, this Article demonstrates that the empirical evidence presented by Professor Levitin—surveys of gasoline retailers in the 1980s—does not prove the RRHCS hypothesis. Factors unique to gasoline retailing are more likely to explain the cross-subsidies that existed in the 1980s than any generalizable principle about the relationship between card acceptance fees and retail prices.¹⁷ Moreover, when viewed in the context of the entire card-accepting economy, the 1980s gas station experience may cut against the RRHCS hypothesis. The data show that when a significant cross-subsidy favoring card users existed, a significant percentage of the dealers in a large and profitable industry adopted a cash-discounting policy. The paucity of similar discounting schemes today—or, alternatively, merchants that do not accept credit cards at all—suggests that the 1980s gas station experience was unique and that substantial cross-subsidies among means of payment are now rare.¹⁸

Third, putting aside the reasons to believe that the RRHCS hypothesis is false,¹⁹ this Article assumes that a pervasive cross-subsidy favoring credit card users does exist and evaluates the impact of that subsidy within an economy rife with similar ones. Lastly, it proposes ameliorative regulatory measures aimed at bringing those who have no banking relationships into the system. Enabling more consumers to benefit from banking services, including credit cards, would provide a greater public service than battling a cross-subsidy that may not exist.

I. THE ECONOMICS OF THE REVERSE-ROBIN-HOOD-CROSS-SUBSIDY HYPOTHESIS

Since the early 1980s, commentators have expressed concern about potential subsidies across means of payment because of high credit card

16. *See infra* Part II.B.

17. *See infra* Part III.A.

18. *See infra* Part III.B.

19. Regardless of one's take on cross-subsidies, it is certainly amusing to think of credit card systems as anti-merry men in the spirit of Mel Brooks' mid-1970s Robin Hood take off, *When Things Were Rotten*. To paraphrase Lee Adams lyrics from the theme song: "They laughed, they loved. They fought, they drank. They jumped a lot of fences. They robbed the [poor], gave to the [rich], except what they kept for expenses." *When Things Were Rotten* TV theme lyrics - Mel Brooks, <http://www.cfhf.net/lyrics/when.htm> (last visited May 21, 2009).

acceptance fees.²⁰ In a credit card system, a receipt for payment of a purchase made with a card flows from the merchant to its card acceptance bank (“acquirer”) and then to the bank that issued the card. The acquirer earns revenue by paying the merchant somewhat less than the total purchase price. Were the fee paid to the acquirer the total price paid by a merchant for card acceptance, there would be no concern about cross-subsidies. Card issuers, however, also effectively impose fees on merchants. For example, for a \$100 transaction, an acquirer might pay the merchant \$98. From the \$2 in revenue, the acquirer would typically keep about \$.50. The remaining \$1.50, seventy-five percent of the revenue, would be passed on to the card issuing bank that would, in turn, bill the cardholder the full \$100 purchase price, plus interest if the account has a balance. In the Visa and MasterCard systems, the amount earned by the issuer is known as the card system’s interchange fee.²¹

Interchange fees essentially tax merchants by requiring them to pay card issuers a fee for the right to accept cards that exceeds the issuers’ cost (plus normal profit) of the service that the merchants receive.²² Card issuers use

20. In 1983, a Board of Governors of the Federal Reserve staff report noted that “‘The [sic] fundamental thesis underlying the [1981] Cash Discount Act is that credit card transactions are more costly to retailers than cash or check transactions, and that the higher costs of credit cards are incorporated in the price of goods and services paid by all customers, resulting in a subsidy of credit buyers by cash purchasers.’” John M. Barron, Michael E. Staten & John Umbeck, *Discounts for Cash in Retail Gasoline Marketing* 16 (Credit Research Ctr., Krannert Graduate Sch. of Mgmt, Purdue Univ., Working Paper No. 57, 1991) available at <http://www.business.gwu.edu/research/centers/fsrp/pdf/WP57.pdf> (quoting Bd. OF GOVERNORS OF THE FED. RESERVE SYS., CREDIT CARDS IN THE U.S. ECONOMY: THEIR IMPACT ON COSTS, PRICES AND RETAIL SALES: A STUDY 5 (1983)) (discussing the high cost of extending credit and processing transactions during the early 1980s, prior to pay-at-the-pump technology).

21. Alan S. Frankel, *Monopoly and Competition in the Supply and Exchange of Money*, 66 ANTITRUST L.J. 313, 340 (1998). Unitary systems that consolidate acquiring in a single entity, like American Express, do not technically have interchange fees, but they nonetheless charge merchants some increment above the marginal cost of the services merchants receive. See Steven Semeraro, *Credit Card Interchange Fees: Three Decades of Antitrust Uncertainty*, 14 GEO. MASON L. REV. 941, 947, 988; David Evans & Richard Schmalensee, *The Economics of Interchange Fees and Their Regulation: An Overview* 11 (MIT Sloan Sch. of Mgmt., Working Paper No. 4548-05, 2005) available at <http://ssrn.com/abstract=744705>. Although the percentage of the purchase price earned by the issuer and acquirer will vary depending on the industry, type of card, and a variety of other factors, the issuer will always receive a substantially larger percentage of the purchase price than the acquirer. *Id.* at 11 n.27.

22. Acquirers cover their costs and earn reasonable profit out of the revenue that they retain, e.g., the \$.50 in the example above. Semeraro, *Credit Card Interchange Fees*, *supra* note 21, at 947.

this extra revenue to stimulate credit card use.²³ Widely observed card issuer practices that are funded in part through interchange fees include below market introductory interest rates for periods of a year or even longer and rewards for card use such as airline miles, cash rebates, and discounts at particular merchants.²⁴

In a 1995 paper, economists Dennis Carlton and Alan Frankel discussed the potential for a cross-subsidy favoring credit card users. Interchange fees, they explained, “can be viewed as a way to raise costs to merchants who then pass those costs on to cash and credit customers alike by charging the same higher price to both.”²⁵ Because merchants generally charge the same price to all customers regardless of the means of payment,²⁶ all customers contribute to the merchant’s costs of accepting various means of payment.²⁷

Carlton and Frankel stressed that only credit card users benefit from the card systems’ stimulus programs. “Cash customers are essentially being taxed to finance credit customers”²⁸ In a follow-up article a decade later,

23. Dennis W. Carlton & Alan S. Frankel, *The Antitrust Economics of Credit Card Networks*, 63 ANTITRUST L.J. 643, 656-58 (1995) [hereinafter Carlton & Frankel, *Antitrust Economics*] (explaining that card issuers will use revenue generated from merchants to compete for cardholders and to increase cardholder spending on cards); Semeraro, *Credit Card Interchange Fees*, *supra* note 21, at 946-56 (summarizing existing economic analysis of interchange fees including the use of excess merchant-side revenue to stimulate card use).

24. Semeraro, *Credit Card Interchange Fees*, *supra* note 21, app. I at 1001-02 (charting credit card offers received at the author’s household during September and October 2006).

25. Carlton & Frankel, *Antitrust Economics*, *supra* note 23, at 660-61.

26. Alan S. Frankel & Allan L. Shampine, *The Economic Effects of Interchange Fees*, 73 ANTITRUST L.J. 627, 632 (2006) (“Retail prices have historically been characterized by ‘price coherence’—prices tend to be the same at a particular retail location regardless of the payment method proffered.”).

27. MICHAEL L. KATZ, COMMISSIONED REPORT, REFORM OF CREDIT CARD SCHEMES IN AUSTRALIA II 41 (2001), available at http://www.rba.gov.au/PaymentsSystem/Reforms/CCSchemes/IICommissionedReport/2_commissioned_report.pdf (“When card-based transactions are more costly to merchants than are non-card-based transactions, non-card users are hurt by card use because merchants have incentives to raise retail prices to reflect their higher costs due to some consumers’ using relatively expensive payment means.”); Jean-Charles Rochet & Jean Tirole, *Externalities and Regulation in Card Payment Systems*, 5 REV. NETWORK ECON. 1, 4 (2006) (“Merchants are likely to pass the extra costs, if any, of card transactions through to consumers in general, that is to cardholders and cash payers altogether.”). This subsidization of card use by merchants may be efficient just as the subsidization of newspaper production and delivery costs by newspaper advertisers is efficient. For a discussion of the economics underlying this subsidization, see generally Steven Semeraro, *The Antitrust Economics (and Law) of Surcharging Credit Card Transactions*, 14 STAN. J.L. BUS. & FIN. (forthcoming 2009) [hereinafter Semeraro, *Antitrust Economics*].

28. Carlton & Frankel, *Antitrust Economics*, *supra* note 23, at 661.

they again emphasized the reverse-Robin-Hood nature of the subsidy, observing that “low income and minority households are far more likely to use cash exclusively than are more affluent households”²⁹ They then asked, without answering, whether “[t]he interchange fee, therefore, may disproportionately harm minorities and the poor because it acts as a tax on cash customers.”³⁰

In 2001, the economist Michael Katz³¹ analyzed cross-subsidies in an Australian-government-commissioned report on the credit card market. He concluded that, all else being equal, “[w]hen card-based transactions are more costly to merchants than are non-card-based transactions, non-card users are hurt by card use because merchants have incentives to raise retail prices to reflect their higher costs due to some consumers’ using relatively expensive payment means.”³² These higher prices, Katz argued, would inefficiently distort consumption patterns by effectively reducing the relative prices of goods sold in markets with less card use.³³

Katz did not attempt to demonstrate empirically that credit cards were in fact a more expensive means of payment. Instead, he explained why one could *not* presume that cards were an efficient payment choice simply because merchants accepted them. Drawing on Julian Wright’s economic analysis,³⁴ Katz reasoned that merchants may derive a private benefit from accepting cards—ensuring that they do not lose customers to competitive merchants—even if credit cards are a less efficient, more expensive means of payment.³⁵ For credit card use to actually lower retail prices, Katz contended

29. Dennis Carlton & Alan Frankel, *Transaction Costs, Externalities, and “Two-Sided” Payment Markets*, 2005 COLUM. BUS. L. REV. 617, 640 [hereinafter Carlton & Frankel, *Transaction Costs*]. “[O]nly 28.5% of families with annual income below \$10,000 possess a bank credit card, compared to 95.8% of families with incomes above \$100,000, and only ‘59% of African-American households had credit cards in 2001, compared to 53% for Latinos and 82% for whites.’” *Id.* (quoting *Study Shows Card Use Linked to Race*, CARDLINE, May 24, 2005, <http://www.cardline.com> (website subscription required)).

30. *Id.* at 640-41. They describe the fee as a tax on cash customers without rigorously determining that it raised retail prices. *Id.*

31. Katz served as the Department of Justice’s expert in its case challenging the Visa and MasterCard rules that prevented banks from issuing American Express and Discover cards. *United States v. Visa U.S.A. Inc.*, 163 F. Supp. 2d 322, 331 (S.D.N.Y. 2001), *aff’d*, 344 F.3d 229 (2d Cir. 2003).

32. KATZ, *supra* note 27, at 41.

33. *Id.* at 39.

34. Julian Wright, *The Determinants of Optimal Interchange Fees in Payment Systems*, LII J. OF INDUS. ECON. 1, 17 (2004).

35. KATZ, *supra* note 27, at 10.

that it would have to produce “a permanent increase in sales from the perspective of the economy as a whole.”³⁶ Without drawing definitive conclusions, Katz summarized the reasons for and against this claim.³⁷

In 2002-03, two economic papers presented formal models recognizing cross-subsidies and predicting that merchant surcharging could, under certain conditions, off-set the negative effects arising as a result of unitary retail prices. Marius Schwartz and Daniel Vincent examined the interacting effects of the card systems’ no-surcharge rules and rewards programs. They found that cash customers are harmed because they fund resources that are used to compensate card users, although the net social welfare effect of surcharging is ambiguous.³⁸ Shortly thereafter, Sujit Chakravorti and William Emmons demonstrated that surcharging could reduce the negative effects of a cross-subsidy from those who carry a balance to those who use the cards merely to collect rewards.³⁹ Both models, however, effectively assume without analysis that credit card acceptance leads merchants to increase their retail prices.⁴⁰

In 2006, Alan Frankel, this time with economist Allan Shampine, concluded that Visa and MasterCard’s above cost card acceptance fees “significantly and arbitrarily raise[] prices,”⁴¹ and distort competition by “steering consumers toward using more costly and less efficient payment

An individual merchant may recognize that failure to accept a major general purpose credit card would lead potential customers to patronize rival merchants that accept those customers’ preferred cards. Hence, from the individual merchant’s perspective, card acceptance generates significant additional sales benefits. The benefits to the overall economy, however, depend on the effects on merchants as a whole (in addition to effects on consumers). It is easy to see that the collective effects may be very different from the individual effects. The reason, of course, is that the merchant’s acceptance decision may have negative effects on rival merchants; the merchant accepts credit cards in part to take business away from its rivals. Thus, the collective benefits of a merchant’s accepting credit and charge cards may be much lower than the merchant’s individual benefits.

Id.

36. *Id.*

37. *Id.* at 11-12.

38. Marius Schwartz & Daniel R. Vincent, *Same Price, Cash or Card: Vertical Control by Payment Networks* 23 (Georgetown Univ. Dep’t of Econ., Working Paper 02-01, 2002).

39. Sujit Chakravorti & William R. Emmons, *Who Pays for Credit Cards?*, 37 J. CONSUMER AFF. 208, 226-27 (2003).

40. *Id.* at 210; *see also* Schwartz & Vincent, *supra* note 38, at 16 (“General results are not available because of the complicated nature of the constraint sets, so we restrict attention to . . . where the merchant derives no gross benefit from processing card rather than cash transactions . . .”).

41. Frankel & Shampine, *supra* note 26, at 671.

methods.”⁴² Their analysis shows a connection between increasing interchange fees and increasing card purchase volume, because card issuers use the revenue from interchange fees to lower prices and increase rewards.⁴³ They claim that “[a]lthough it is true that an interchange fee will stimulate card usage, it accomplishes this not merely by shifting costs of card usage to merchants, but to non-card customers.”⁴⁴

Like Katz, however, Frankel and Shampine did not fully consider the benefits that increasing card use might provide to merchants. Instead, they made the logical point that, all else equal, as fees increase, merchants will “raise retail prices faced by cash (and other low merchant cost) customers.”⁴⁵ As Katz recognized, however, all else is not equal if credit card use increases sales or provides other benefits that might enable a merchant to lower its prices. On that critical point, Frankel and Shampine conduct no new analysis.⁴⁶

Most recently, Adam Levitin builds on the prior work, claiming to have empirically confirmed the existence of the RRHCS hypothesis.⁴⁷ He urges Congress to overturn state law and the credit card systems’ rules which prohibit merchants from surcharging card transactions or selectively refusing to accept the most expensive cards within a brand.⁴⁸ Levitin believes that merchants would refuse or surcharge these expensive reward cards, ameliorating—and perhaps eliminating—any cross-subsidy.⁴⁹

II. ASSESSING THE COSTS AND BENEFITS OF PAYMENT MECHANISMS

Assuming that a merchant charges a unitary price regardless of the customer’s payment choice, a retailer’s accepting a particular payment mechanism may lead a merchant to increase or decrease its retail prices depending on the relative *net* costs (which could be negative) of the payment mechanisms that the merchant accepts. The net cost consists of the out-of-pocket expenses of accepting a payment mechanism less the incremental

42. *Id.* at 672.

43. *Id.* at 632-37.

44. *Id.* at 658-59.

45. *Id.* at 636.

46. They rely on references to merchant perceptions of the cost of accepting credit cards that appear to ignore the benefits that cards provide to merchants. *Id.* at 636 (“Merchants generally consider credit . . . cards . . . to be the most expensive of the commonly accepted payment methods.”).

47. Levitin, *Social Costs*, *supra* note 10, at 28-31.

48. *Id.*

49. *Id.*

benefits that the merchant derives from customers choosing that form of payment compared to the alternatives.⁵⁰ If credit cards have higher net costs for merchants than other means of payment, then those who use other payment mechanisms would pay more because a competitive merchant charging a single price would have to raise its price to all customers to cover its incremental net card acceptance cost.⁵¹ But if credit cards turn out to have a lower net cost, then card acceptance would lead to lower prices for all customers.

This section analyzes the relative costs and benefits of accepting various means of payment and concludes that significant disparities producing cross-subsidies in favor of credit card use are unlikely and, even if they exist, non-credit card users are likely to be better off when merchants accept credit cards.

A. *The Costs of Accepting Payment Mechanisms*

Determining the cost of a means of payment is more complicated than asking how much a merchant must pay to some particular entity. Any form of payment will create expenses for the merchant. For example, one tends to think that accepting cash is free because no entity charges a retailer for it. In fact, cash-accepting merchants bear significant costs that would not be borne by a merchant that only accepted cards.⁵² These costs range from the time it takes to make change to the costs of counting the cash and making deposits to theft losses and the cost of insuring against them.⁵³ Under a unitary retail

50. See Wright, *supra* note 34, at 18 (“[O]ne cannot presume . . . that cash-paying customers necessarily pay more as a result of the existence of more expensive card-paying customers—one has to consider the additional benefits the cards provide as well.”).

51. Frankel & Shampine, *supra* note 26, at 632 (“To the extent that credit cards are a high-cost payment method to merchants, then all consumers supply the funds that are collected by merchants and paid as interchange fees.”).

52. Consumers too bear a significant cost when they use cash. A customer must get the cash from a bank or ATM, which takes time, risks theft or loss, and may involve an out-of-pocket fee as well. A consumer who does not run a balance on credit cards may thus experience considerable savings when using a card.

53. Timothy J. Muris, *Payment Card Regulation and the (Mis)application of the Economics of Two-Sided Markets*, 2005 COLUM. BUS. L. REV. 515, 538 (2005).

Cash, for instance, imposes costs on retailers and consumers that electronic payment systems do not. One example is the labor cost associated with counting cash and reconciling the cash register drawer. As labor costs increase, the cost of cash payments to retailers becomes more expensive relative to electronic payments. In addition, cash has a higher risk of theft and loss for both consumers and merchants

pricing policy, a non-cash purchaser must help cover these expenses, just as a cash-paying customer contributes to the merchant's cost of accepting credit cards.

To determine the direction of any subsidy, one must look to the relative costs of various means of payment. Sophisticated cost studies have attempted to take account of the full range of merchant expenses and quantify the relative costs of accepting various means of payment. Although far from definitive, this work supports the view that credit card acceptance has a higher out-of-pocket cost than other forms of payment.⁵⁴ Importantly, however, these studies show that the difference between credit cards and cheaper means of payment is significantly less than one percent of the retail price at average transaction levels.⁵⁵ In absolute dollars, a small percentage difference can add up to a lot of money, and card acceptance costs have increased since these studies were conducted. If the incremental cost difference remains relatively small, however, it could easily be trumped by relatively modest incremental credit card benefits.

B. The Benefits from Accepting Payment Mechanisms

Allocating and assessing the value of a means of payment is complex because the costs and benefits of one payment mechanism often impact customers who use others in ways that go beyond retail prices.⁵⁶ For example, some supermarkets now use change dispensers that speed up checkout lines. Although this cost is directly attributable to the merchant's acceptance of cash, the benefits of faster checkout times extend to all

(from employee malfeasance). The costs associated with collecting and transporting cash safely, most notably armored cars, do not exist for payment cards.

Id.

54. Daniel D. Garcia-Swartz, Robert W. Hahn & Anne Layne-Farrar, *The Move Toward a Cashless Society: Calculating the Costs and Benefits*, 5 REV. NETWORK ECON. 199, 203, 208, 213-14 (2006); David Humphrey et al., *What does it Cost to Make a Payment?*, 2 REV. NETWORK ECON. 159, 161-63 (2003).

55. Garcia-Swartz, Hahn & Layne-Farrar, *supra* note 54, at 203, 208, 213-14. Because credit card merchant fees are based on a percentage of the purchase price, while some other means of payment are priced per transaction, the cost difference increases with higher transaction amounts, but so does the benefit of easily accessible consumer credit.

56. See KATZ, *supra* note 27, at 35 (“[C]ard-based transactions may have costs and benefits for both sides of the market simultaneously, many costs are common”); Margaret E. Guerin-Calvert & Janusz A. Ordovery, *Merchant Benefits and Public Policy Towards Interchange: An Economic Assessment*, 4 REV. NETWORK ECON. 384, 396-407 (2005); see also *id.* at 386 (“It is not at all clear that these complex bundles of benefits can be neatly converted into a ‘per transaction’ benefit with a well-calibrated cost”).

customers. Similarly, when increased credit card use reduces a merchant's theft losses, the cost of accepting cash goes down, leading to lower prices that benefit all consumers.⁵⁷

Merchant benefits from a means of payment may also evolve over time in ways that are difficult to isolate from other causes. As a result, the benefits of credit card use may be difficult for a merchant to quantify and take into account in its day-to-day pricing decisions. The cost of card acceptance is immediate while the benefits of increased sales and savings from prompt payment and reduced default are delayed and difficult to isolate from other potential causes. For example, if a merchant begins accepting cards at the start of an economic downturn, purchase volume may fall, payments may be less timely, and defaults rates may increase in absolute terms. Card acceptance may nevertheless have lessened the impact of each negative event in ways that would be hard for the merchant to perceive, much less measure. Nevertheless, the merchant's prices could be lower than they would have been if it had never accepted cards.

Although these difficulties suggest that a definitive empirical measure of the net costs of various means of payment is not readily forthcoming, analysis may still shed light on the likelihood that significant cross-subsidies exist. The most significant incremental benefit of credit card use is the potential to increase sales. Obviously, an easily accessible line of credit will enable some consumers to make purchases that they could not otherwise make because of then-existing resource constraints and the relatively high cost of obtaining other forms of credit.⁵⁸ In addition, Professor Levitin has persuasively demonstrated that psychological factors lead credit card users to

57. Although these types of benefits *could* be obtained with other electronic forms of payment, such as pin-based debit cards which would impose lower out-of-pocket costs on merchants once the technology for acceptance is installed, the same level of benefits would not be obtained without credit cards. Debit card use is unlikely to replace reduced credit card use on a dollar-for-dollar basis for at least three reasons: (1) many consumers need, or prefer, the float period or revolving credit offered by credit cards; (2) others value the security of maintaining their level of cash-on-hand in case an emergency expense arises for which they cannot use a credit card; and (3) some fear that fraudulent use of their debit card would have more severe consequences than credit card fraud. With respect to this last factor, the most significant difference is that debit fraud can empty the cardholder's checking account, leaving her without access to her money for some indeterminable period of time. By contrast, credit card fraud does not raise that concern because a credit card issuer has no direct access to the cardholder's deposit accounts.

58. The cost of obtaining credit cannot be gauged solely by the interest rate. Convenience is also a critical factor. For example, both home equity and pay-day loans require substantial up-front investments of time and planning that are not required of customers using credit cards.

spend more than they otherwise would, even when resource constraints do not exist.⁵⁹ A 1996 Ernst & Young survey found that merchants recognize this effect: 83% indicated that accepting credit cards would increase sales and 58% thought accepting credit cards would increase profits.⁶⁰

If credit card use leads to increased consumer spending, it could effectively lower retail prices. Higher sales levels would enable retailers to spread their fixed costs over greater sales volume and potentially enable them to reduce their marginal costs as well. This cost spreading and savings would tend to reduce retail prices. If credit cards lead to sufficient increases in customer spending, the benefits to merchants could outweigh the incremental out-of-pocket costs of credit card acceptance, and a merchant that starts accepting credit cards might thus leave its retail prices the same or even lower than despite higher out-of-pocket card acceptance fees.⁶¹

One might be tempted to argue that credit cards must have lower net costs than other forms of payment, because if they did not, merchants would simply refuse to accept them. Economists have cautioned, however, that a particular merchant's perceived increase in volume as a result of credit card acceptance may be the result of shifting sales among merchants rather than actual increases in consumption levels.⁶² This is true because merchants use card acceptance strategically in order to attract sales away from, and avoid losing sales to, their competitors. This strategic behavior produces a private benefit—the merchant gains sales that would otherwise have gone to

59. Adam J. Levitin, *The Antitrust Super Bowl: America's Payment Systems, No-Surcharge Rules, and the Hidden Costs of Credit*, 3 BERKELEY BUS. L.J. 265, 288 (2005) [hereinafter Levitin, *Antitrust Super Bowl*] (explaining that with credit cards consumers will "make more purchases because they feel less constrained in credit spending than they do when spending cash on hand"); Levitin, *Social Costs*, *supra* note 10, at 38-39.

60. Chakravorti & Emmons, *supra* note 39, at 213 (citing *Do You Really Know Your Customers?*, CHAIN STORE AGE, Jan. 1996, at 6A-10A (relying on data from a 1996 Ernst & Young survey of retail payment systems)).

61. Levitin, *Social Costs*, *supra* note 10, at 28 (recognizing that credit card use could lead to lower prices "if it increases sales sufficiently"). One criticism of this analysis is that credit cards are gaining acceptance in areas of the economy such as utilities, medical services, and insurance where increased sales volume is unlikely to flow from credit card acceptance. See Lingling Wei, *AmEx Plans Mortgage Rewards*, WALL ST. J., May 23, 2007, at D4 (discussing an attempt by American Express to expand acceptance of credit cards for different types of bills). A homeowner is unlikely to use more electricity, for example, because she can now pay with a credit card. These types of merchants, however, may experience other benefits not available to more traditional card-accepting merchants. For example, credit card acceptance may enable more timely payment and lower levels of default. If card acceptance has these effects, it might lower overall costs and therefore prices, even at merchants which are unlikely to increase sales as a result of credit card acceptance.

62. See *supra* notes 34-35.

competitors—but not an increase in social welfare because overall consumption remains the same.⁶³ As a result, a merchant may accept cards despite a net cost above other means of payment, because failing to accept them would lead to lost sales and an even greater reduction in profit.

If merchants in a particular industry accept cards for strategic reasons, prices throughout that industry would be higher with credit card acceptance than without it. Nevertheless, non-credit card users may still be better off if the particular stores at which they shop accept credit cards than they would be if those stores did not accept them. To understand why this is true, assume that a merchant accepts cards only because it believes that it has to do so to avoid losing customers to competitive merchants. Such a merchant would know that card acceptance would cost more than other means of payment and any increase in sales or other benefits would not outweigh the higher incremental out-of-pocket cost. Nevertheless, the merchant counter-intuitively chooses to accept cards because failing to do so would cause it to lose sales to competitors, reducing its profits, and forcing it to increase its prices, to an even greater extent than would card acceptance.

In this case, the merchant's prices with credit card acceptance would be higher than they would be in a hypothetical world in which no merchant in the industry accepted credit cards. In the real world in which competitors do accept cards, however, prices would be lower if the merchant accepted credit cards because its revenue would be higher. From the perspective of non-card customers, if some stores are accepting credit cards, then non-credit card users would be better off when the stores at which they shop also accept credit cards.

This conclusion depends on the relationship between the effect of card acceptance on merchant sales and the incremental costs of accepting cards. Although analysts have little or no data bearing on the question, the paucity of non-credit card merchants in many industries suggests that card acceptance by a particular retailer leads to higher profits and lower prices in an industry in which some merchants accept credit cards. If a merchant could actually charge a significantly lower price if it did not accept cards, one would expect to see non-credit merchants seeking to attract consumers by under-cutting the prices of credit accepting merchants.⁶⁴ Despite substantial

63. See KATZ, *supra* note 27, at 26-27; see also *supra* note 35.

64. Joshua S. Gans & Stephen P. King, *The Neutrality of Interchange Fees in Payment Systems* 21 (Melbourne Bus. Sch., Working Paper No. 2001-03, 2001), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=276228 (“[T]he cash price from a credit card merchant will also make cash-only merchants appear to be relatively cheap for those customers that use cash as well as credit.”).

increases in card fees over the last decade,⁶⁵ however, retailers, by and large, have not pursued this competitive response.⁶⁶ In fact, the trend has been in the opposite direction. Industries that previously did not accept credit cards—supermarkets, convenience stores, utilities, insurance companies, fast food restaurants, and health care providers, for example—have begun to do so, while virtually no industry or major player in an industry has stopped accepting credit cards because of fee increases.⁶⁷

An omniscient social planner would take issue with this analysis. Knowing with certainty that accepting credit cards would raise prices in a particular industry compared to what they would be if no merchant in that industry accepted cards, the planner would simply prohibit card acceptance and everybody—except the card systems and those who need to purchase on credit—would be better off.

Like fairies, however, omniscient social planners are hard to find these days. And in a world of uncertainty, prohibiting card acceptance in a particular industry would be quite risky. Although the magnitude of the effect is uncertain, credit card acceptance probably does increase overall spending to some extent. Merchants thus generally have a dual motive to accept cards: (1) overall spending increases, and (2) the strategic desire to prevent customers from switching to competitors. A government regulator, and even the merchant itself, would likely be unsure as to the relative strengths of these separate incentives. As a result, a regulator that prohibited credit cards in a particular industry would be shooting in the dark at an enemy that might not be there. As a practical matter, no reasonable regulator would do it.

65. DAVID S. EVANS & RICHARD SCHMALENSEE, *PAYING WITH PLASTIC: THE DIGITAL REVOLUTION IN BUYING AND BORROWING* 126 (2d ed. 2005); James M. Lyon, *The Interchange Fee Debate: Issues and Economics*, THE REGION, June, 2006, http://www.minneapolisfed.org/publications_papers/pub_display.cfm?id=3235.

66. One notable exception is ARCO gas stations. Interestingly, ARCO claims to be a high-volume seller despite refusing to accept credit cards. ARCO Gasoline FAQs, <http://www.arco.com/sectiongenericarticle.do?categoryId=16002950&contentId=7023062> (last visited February 28, 2009).

67. See *United States v. Visa U.S.A. Inc.*, 163 F. Supp. 2d 322, 340 (S.D.N.Y. 2001), *aff'd*, 344 F.3d 229 (2d Cir. 2003). (“[B]oth Visa and MasterCard have recently raised interchange rates charged to merchants a number of times, without losing a single merchant customer as a result.”). Economies of scale may require merchants to accept cards in markets that are too small to support separate credit card and non-credit card merchants. For example, many small towns may be unable to support two ethnic restaurants of a particular type. KATZ, *supra* note 27, at 24. But economies of scale cannot explain the paucity of non-credit card merchants even in big cities.

C. Cross-Subsidies and High-Priced Reward Cards

Credit card systems now charge higher interchange fees for reward cards than for regular, non-reward credit cards.⁶⁸ Throughout his work, Professor Levitin has argued that although credit cards provide merchants with significant benefits, higher-priced reward cards do not. Virtually all purchases made with a reward card, he contends, would still be made even if the merchant did not accept the card because the customer could always use a less expensive ordinary credit card.⁶⁹ The incremental cost of reward cards, he claims, thus necessarily outweighs their non-existent benefit to merchants. And retailers must logically increase prices to all consumers—including those who use regular credit cards—as a result of reward card acceptance.⁷⁰

Although the identity of those hurt by the cross-subsidy may differ across merchant types, Professor Levitin argues, affluent consumers who use the most expensive reward cards will always benefit.⁷¹ Even without the benefit of omniscience, he argues, the regulator could safely and confidently do away with the reward cards.⁷²

There is reason to be skeptical about Professor Levitin's contention that reward cards do not appreciably increase spending. Cardholders earning rewards effectively face a lower price for the products and services that they buy.⁷³ It would be irrational to assume that lower prices do not, at least in some cases, lead to more purchases. Professor Levitin claims that the magnitude of the effect would be *de minimis*, asserting that the typical three-hundred dollar limit on cash back cards is insufficient to stimulate much extra spending.⁷⁴ But, many reward programs are not so limited;⁷⁵

68. Adam J. Levitin, *Priceless? The Economic Costs of Credit Card Merchant Restraints*, 55 UCLA L. REV. 1321, 1323 (2008) [hereinafter Levitin, *Economic Costs*].

69. Levitin, *Social Costs*, *supra* note 10, at 16.

70. *Id.* at 13-18.

71. *Id.* at 34.

72. *Id.* Professor Levitin contends that the magnitude of cross-subsidies and the identities of the winners and losers will differ depending on the particular product and merchant payment costs. Sometimes all credit card users will benefit as cash, check, and debit card users subsidize them. *Id.*

73. Merchants commonly offer rebates up to five percent for using a particular card to make purchases at its retail outlets. *See infra* note 107. As a result, those who use reward cards always benefit relative to other consumers. Levitin, *Social Costs*, *supra* note 10, at 34.

74. Levitin, *Social Costs*, *supra* note 10, at 13 n.48.

75. For example, the author recently received a solicitation for a credit card that deposits two percent of all purchases directly into the cardholder's Charles Schwab investment account with no cap on the amount of rewards. Direct Solicitation for Schwab

cardholders can use more than one card, and three-hundred dollars a year may be a significant incentive for a cardholder on a small budget. Moreover, the same psychological factors causing individuals to spend more when they make purchases with a credit card, even when they do not need the credit,⁷⁶ may lead them to spend more on a reward card than one might rationally expect.⁷⁷

Even if reward cards do not increase overall spending, however, non-card-using consumers are still likely to be better off if a merchant accepts all cards. If one merchant stopped accepting high-priced reward cards, it would likely lose sales to competitors that strategically continued to accept them in order to attract the business of reward-card-holding, high-spending affluent consumers.⁷⁸ The reward-card-refusing merchant would lose the patronage of some of its best customers, causing it to raise its prices to cover its fixed costs, and leaving non-reward card users worse off than they would have been if the merchant had simply accepted all credit cards.

One might nonetheless argue that consumers would be better off if merchants were free to surcharge card transactions made with, or selectively refuse to accept, high-priced reward cards. Merchants claim to perceive credit cards as an incrementally expensive means of payment,⁷⁹ and to the

Bank Invest First Visa Signature credit card from Charles Schwab Bank to author (received May 2009) (on file with author).

76. See Levitin, *Antitrust Super Bowl*, *supra* note 59, at 288.

77. The allure of something for nothing can be quite powerful. For example, customers stood in line for hours at Papa John's Pizzerias in Cleveland to purchase pizzas for \$.23 as part of a promotion to support LeBron James. Laura Johnston, *It's Pie, Baby, Not "Crybaby"*, PLAIN DEALER, May 9, 2008, at A1. *But see* Andrew Ching & Fumiko Hayashi, *Payment Card Rewards Programs and Consumer Payment Choice* 4 (Fed. Reserve Bank of Kan. City, Working Paper No. 06-02, 2006) (concluding that reward card holders do not increase purchases as a result of rewards).

78. Semeraro, *Antitrust Economics*, *supra* note 27 (explaining that a rule permitting surcharging would likely lead to a patchwork of surcharging as some merchants sought a competitive advantage by continuing to accept reward cards without surcharges). Interestingly, this is exactly what happened in the gasoline retailing market cited by Professor Levitin. While some stations trumpeted discounts for cash purchases, others, including those selling under the banner of the giant Shell Oil, touted the same price for cash or credit. Barron, Staten & Umbeck, *supra* note 20, at 16, 18-19 (explaining that the decision to offer cash discounts depended on the relative elasticity of cash and credit customers which differed across stations).

79. BD. OF GOVERNORS OF THE FED. RESERVE SYS., REPORT TO THE CONGRESS ON THE DISCLOSURE OF POINT-OF-SALE DEBIT FEES 15 (2004) *available at* <http://www.federalreserve.gov/boarddocs/rptcongress/posdebit2004.pdf> (“[M]any merchants view cash, checks, and PIN debit as comparable in cost on an average per-transaction basis and . . . credit as relatively more expensive.”).

extent that card benefits are real, some commentators have argued, merchants would have appropriate incentives to preserve those benefits in any surcharging or selective refusal scheme.⁸⁰ Professor Levitin has thus predicted that merchants would limit surcharges and refusals to the high-priced reward cards that provide little incremental benefit.⁸¹

The outcome, however, is unlikely to be uniform. Just as some merchants perceived a benefit in accepting Diners Club and American Express when both were priced substantially higher than Visa and MasterCard, some merchants would likely continue to accept high-fee cards without surcharging. These merchants might perceive corporate card holders, for example, as particularly valuable because they frequent only establishments that accept their company's card. Similarly, certain rewards cards might be perceived as worthwhile to retailers desiring to attract the type of customer using that card. Rental car companies, for example, might see particular value in attracting customers whose cards provide airline miles and other travel benefits. Or local hardware stores might choose to accept Home Depot's reward card because they want to attract customers interested in home improvement. Just as Diners Club and American Express survived with lower merchant acceptance than Visa and MasterCard, higher priced reward cards would likely continue, albeit with some merchants refusing to accept, or surcharging, them. As a result, merchants that choose a selective refusal or surcharging strategy, just like merchants that drop credit cards altogether, would risk losing their best customers to their competitors that continued to accept all cards without surcharging. Ultimately, the merchants most likely to surcharge may be those with market power that would not necessarily reduce their retail prices.⁸²

D. The Likelihood of Substantial Cross-Subsidies

This analysis cannot establish that the benefits of card acceptance at current usage and fee levels in fact enable merchants to charge lower prices than they would if they did not accept credit cards generally (or high-priced

80. KATZ, *supra* note 27, at 21-22; Carlton & Frankel, *Transaction Costs*, *supra* note 29, at 635-39.

81. Levitin, *Economic Costs*, *supra* note 68, at 1353-55.

82. Semeraro, *Antitrust Economics*, *supra* note 27; Julian Wright, *Optimal Card Payment Systems* 8 (May 8, 2002) (unpublished manuscript available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=278047) ("When surcharging is allowed, merchants with monopoly power will exploit their power by setting a price to extract surplus from inframarginal cardholders.").

reward cards in particular). Given the relatively small differences in out-of-pocket costs between credit cards and other means of payment, however, the potential benefits identified here create at least a reasonable possibility that credit card acceptance leads to lower prices in some retail markets. And the disappearance of non-credit-card-accepting merchants across the economy suggests that even if credit cards increase prices overall, a particular merchant's failure to accept them would lead to even greater price increases. In a world that includes credit cards (and reward cards), non-card (and non-reward-card) users are likely to be better off if the stores at which they shop accept all credit cards.

III. EMPIRICAL PROOF OF THE REVERSE-ROBIN-HOOD-CROSS-SUBSIDY HYPOTHESIS

Professor Levitin cites two surveys of gasoline pricing in the 1980s, claiming that they demonstrate empirically that card systems are in fact Robin Hoods in reverse (or at least a band of very un-merry men). These surveys show that some gas stations during this era offered cash discounts while others charged a unitary price. In both surveys, the retailers offering cash discounts charged significantly lower prices to customers using cash, and significantly higher prices to customers using credit cards, than the unitary prices charged by stations offering no discount.⁸³

Although this data is consistent with the RRHCS hypothesis, Professor Levitin acknowledged that one "should be cautious in extrapolating too much from the gasoline surveys."⁸⁴ He nevertheless claims to have "demonstrate[d] empirically that credit card rewards programs are funded in part by a highly regressive, sub rosa subsidization of affluent credit consumers by poor cash consumers."⁸⁵ This Part demonstrates that the generalizations that enable him to make this claim are not supported by the empirical survey data that he cites and, more importantly, that data may actually cast doubt on the likelihood that substantial cross-subsidies are common in modern retail markets.

83. Levitin, *Social Costs*, *supra* note 10, at 28-31.

84. *Id.* at 32.

85. *Id.* at 1 (italics omitted).

A. *Unique Aspects of the Retail Gasoline Market in the 1980s May Explain the Cross-Subsidy*

Professor Levitin reads the gasoline pricing surveys to “confirm that cash consumers subsidize the transaction costs that credit consumers impose on merchants by using credit”⁸⁶ and “indicate that merchants who accept credit cards but do not offer cash discounts have higher prices for all consumers because of the costs of accepting credit.”⁸⁷ Analysis of gas station cash discounting during this period indicates, however, that the discounting scheme arose because of factors unique to that industry.⁸⁸ These factors included the unusually high cost of extending credit—which many oil companies did through private label credit cards—and the delays and incremental accounting costs imposed on the stations when customers used credit cards.⁸⁹

For many years, oil companies offered single-brand credit cards with an interest-free float period to foster customer loyalty. In the early 1980s, the simultaneous dramatic increases in gasoline prices and interest rates combined to impose crushing additional costs on those oil companies that provided their own credit cards.⁹⁰ Cash discounts were an effective means to decrease credit transactions.

In addition, during this period, credit card use also increased transaction time. Visa and MasterCard authorization was relatively slow and a customer using a card had to return to the payment area after pumping to sign the receipt. The station then had to collect and process the paper receipts, which required accounting skill and delayed payment to the station. All this increased the stations’ costs of accepting credit cards in significant ways that had little to do with the fees charged by Visa and MasterCard. Gas stations would have obtained substantial cost savings by encouraging cash purchases even if credit card acceptance had been free.

To illustrate this point, compare a gas station to a jewelry store. The jeweler would likely benefit from its customers’ access to credit far more

86. *Id.* at 32.

87. *Id.* (emphasis added).

88. See Barron, Staten & Umbeck, *supra* note 20, at 7-9, 21 (citing the high cost of extending credit during the early 1980s and the cost of processing card transactions prior to pay-at-the-pump technology).

89. *Id.* at 7-9.

90. *Id.* at 9. These factors influenced oil companies more than general purpose card systems because oil company card users were more likely to pay off their balances during the interest-free float period. *Id.*

than a retailer of a commodity product such as gasoline. Conversely, transaction speed and receipt processing would matter much less to a jeweler than to a gas station owner because of higher purchase amounts and fewer overall transactions. Generalizing from one industry to the other with respect to the effect of credit card acceptance on retail prices would thus be highly suspect because the costs of accepting cards are much higher, and the benefits much lower, for the gasoline retailer. Knowing that a cross-subsidy existed in gasoline retailing in the 1980s simply does not help us determine whether a similar subsidy existed at jewelry stores back then, much less today.

Even extrapolating across time in gasoline retailing would be extremely difficult. Shortly after the surveys were conducted, card authorization time decreased and pay-at-the-pump technology eliminated the delays associated with signing, and the labor needed to process, credit card receipts.⁹¹ Many customers also replaced oil company cards with bank-issued credit cards, reducing the dollar amount that the oil companies had to finance to provide the interest-free float period.⁹² Coincident with these developments, most stations abandoned cash discounts even though the credit card systems' interchange fees were rising.⁹³ This suggests that the unusual aspects of the retail gasoline market in the 1980s were responsible for the observed cross-subsidy, rather than a more generally applicable aspect of credit card acceptance such as the interchange fee. As a result, the survey data can tell us little, if anything, about gasoline retail markets today, much less other markets.

91. *Id.* at 21.

Simply put, electronic draft capture (EDQ [sic] terminals transmit information to a company's credit card processing center via electrons, rather than paper, at considerably lower cost.

EDC technology reduces costs for several reasons. Instead of paper credit card slips being bundled and shipped in bulk to a processing center, computerized transaction data can be stored and transmitted daily via telephone lines. This technology saves labor costs and reduces errors.

Id.

92. *Id.* at 10-11 (explaining that gas stations began accepting bank credit cards during this period).

93. See EVANS & SCHMALENSEE, *supra* note 65, at 126 (explaining that interchange fees had increased between 1995 and 2001); Barron, Staten & Umbeck, *supra* note 20, at 5 (explaining that cash discounting peaked in 1989 at thirty-four percent of the market and steadily declined thereafter); Lyon, *supra* note 65 (explaining that interchange "fees for credit cards have risen on five occasions since 1994, most recently in April 2005").

Professor Levitin disagrees with this conclusion, contending that the cross-subsidization observed at gas stations in the 1980s should be even worse today.⁹⁴ In each case, however, he fails to account for the special circumstances affecting gasoline retailing. First, he points out that a higher percentage of transactions are made with credit cards today compared to the 1980s, and thus merchants have more card fees to spread across their non-card customers.⁹⁵ If increased general-purpose card use made the problem worse, one would have expected gas stations to increase the cash discount in the 1990s as credit card use grew. In fact, cash discounting declined dramatically.⁹⁶ This counter-intuitive result can be explained by the factors specific to gasoline retailing. As the costs of delay at the point of sale and providing float decreased for oil companies, the difference in net cost between cards and other forms of payment likely decreased to the point that no significant cross-subsidy remained despite increasing card use and interchange fees. This shift in pricing policy thus suggests that, at least for gas stations, increasing card use did not significantly exacerbate any cross-subsidy that may have existed.⁹⁷

Second, Professor Levitin reasons that, in the 1980s, stations that “wanted accounting and speed benefits had only one choice—credit,”⁹⁸ while today debit cards also serve those purposes.⁹⁹ He thus concludes that “[m]erchants who maintained only one price for credit and cash in the 1980s would have been more willing to absorb the cost of accepting credit cards, rather than pass it on to all consumers, because of the benefits they received from taking credit cards.”¹⁰⁰ Now, he reasons, a greater portion of the cost would be passed on to all customers.¹⁰¹

94. Levitin, *Social Costs*, *supra* note 10, at 33.

95. *Id.* Although general purpose card use has increased dramatically since the 1980s, card use in retail gasoline markets has grown considerably less because of the relatively high percentage of consumers who then used oil company credit cards. See Barron, Staten & Umbeck, *supra* note 20, at 7-8.

96. Barron, Staten & Umbeck, *supra* note 20, at 5 (explaining that cash discounting peaked in 1989 at thirty-four percent of the market and steadily declined thereafter).

97. Similarly, to the extent that general purpose credit card use displaced oil company credit card use, the growth in general purpose card use could have saved the oil companies the costs of extending credit for the interest-free float period, fraud and credit losses, and administering their own program. A similar dynamic could affect other industries that had credit card programs of their own, depending on the tendency of cardholders to run balances and pay interest.

98. Levitin, *Social Costs*, *supra* note 10, at 33.

99. *Id.*

100. *Id.*

101. *Id.*

Again, however, this analysis ignores factors unique to gasoline retailing. In the 1980s, general purpose credit cards likely did not provide accounting and speed benefits to gasoline retailers. Pumps mechanically accounted for gas sales and, as discussed above, credit card purchases took longer than cash purchases and required greater labor on the accounting side. Moreover, to the extent that there were benefits from card use, many stations could have obtained them from their own single-brand cards. Since gas stations in the 1980s received virtually no incremental benefits from general purpose card acceptance, modern retailers are likely to benefit more from the accounting and speed benefits of credit cards, even though they also obtain the same types of benefits from debit cards.¹⁰²

Finally, Professor Levitin argues that in the 1980s credit card acceptance likely provided a greater sales boost for merchants than it does today because credit card borrowing has flattened.¹⁰³ Again, however, gasoline retailers seem among the least likely to be influenced by the potential for card acceptance to increase actual spending levels. Impulse purchasing of gasoline is presumably quite rare, and to the extent that card acceptance enabled stations to steal business from competitors, major branded gas stations already had the benefit of oil company credit cards.¹⁰⁴ Expanding general purpose card acceptance in the 1980s may have enabled smaller stations to erode this advantage, leading the large stations to lose business as a result of credit card acceptance. So, even assuming that credit cards generally have less impact on spending levels now than they did in the 1980s, modern merchants likely experience a greater increased-spending benefit from credit cards than gas retailers did in the 1980s.

Although this analysis does *not* rule out the possibility that significant cross-subsidies between means of payment exist in the economy today, it cautions against drawing strong conclusions from the gasoline retailer pricing data.

102. For a discussion of debit cards, see *supra* note 57. Debit card use would be unlikely to entirely replace the benefits that merchants obtain from card acceptance because not all credit card users would be able to switch to debit cards if credit cards were no longer accepted. For example, those with an insufficient current balance in their checking account could not substitute a debit card for a credit card.

103. Levitin, *Social Costs*, *supra* note 10, at 33 n.128 (citing STEVE MOTT, BETTERBUYDESIGN, THE CHALLENGE OF BANK CARD INTERCHANGE 18 (2005), <http://www.betterbuydesign.com/media.html> (follow “Download in PowerPoint” link) (showing a flattening of credit card use in the 1990s).

104. See Barron, Staten & Umbeck, *supra* note 20, at 7-9, 20-21 (referring to gas station private label credit cards during this period).

B. Viewed in a Broader Context the Gasoline Survey Data Cast Doubt on the Continuing Existence of Substantial Cross-Subsidies in Markets Charging a Single Price

Viewed in the context of the entire retail economy, the gasoline survey data suggests that significant cross-subsidies are rare. Despite increasing interchange fees over the last two decades, no industry, or individual large retailer, has instituted a cash discounting program.¹⁰⁵ One could, of course, argue that just as unique aspects of gasoline retailing explained the cross-subsidy, similarly unusual factors may explain the oil companies' decisions to pursue a cash discounting scheme. Gasoline is a commodity product with a simple, well understood pricing structure that generates all, or a significant portion of, the revenue for many of the stations that sell it. Instituting a cash discounting program in a multi-product industry, one might argue, could be much more complex and costly,¹⁰⁶ and that—rather than a lack of cross-subsidies—could explain why no other industry has instituted a broad-based cash discounting program.

The argument that discounting is too costly, however, is undermined by the multitudes of discounting programs across retail markets. Supermarkets, airlines, restaurants, home improvement stores, clothing retailers and even gas stations, charge certain customers less than others. These programs utilize a variety of formats, including newspaper and flier coupons, loyalty programs, and, perhaps surprisingly, even discounts for using a credit card.¹⁰⁷

105. See Scott Schuh & Joanna Stavins, *Summary of the Workshop on Consumer Behavior and Payment Choice*, 10 FED. RESERVE BANK OF BOSTON: RESEARCH REVIEW 4, 6 (2008), available at <http://www.bos.frb.org/economic/ResearchReview/issue10/issue10.pdf> (“[D]ifferential pricing is rare in the United States”).

106. Factors making cash discounting difficult include (1) the cost of implementing cash discounts; (2) their ineffectiveness in influencing consumer behavior; see Levitin, *Social Costs*, *supra* note 10, at 35 (discussing reasons why merchants do not currently offer cash discounts); and (3) their permissibility under the card system rules. See MERCHS. PAYMENTS COAL., CREDIT CARD INTERCHANGE FEES: ISSUES AND ANSWERS, 9 (2007), <http://www.unfaircreditcardfees.com/uploads/InterchangeIssues.pdf> (claiming that while cash discounts are formally permitted the card systems make implementing them virtually impossible for many merchants).

107. Certain co-branded credit cards offer consumers discounts of various sorts. See List of Reward Credit Cards, <http://www.creditcards.com/reward.php> (outlining the benefits of a variety of reward credit cards) (last visited May 23, 2009) As examples, I carry a Home Depot card that pays a five percent rebate for purchases made there, see The Home Depot Rewards MasterCard From Citibank, <http://www.filife.com/reviews/citibank-the-home-depot-rewards-mastercard> (last visited May 20, 2009), and stores offer special promotions including ten-to-twenty percent discounts if the purchase is made with a particular credit card. See, e.g.,

If significant cross-subsidies similar to those observed in Professor Levitin's data existed in these segments of the economy, retailers already employing discounts would be expected to use them to discourage credit card use. That none of these industries has extended their discount programs to cash-paying customers suggests that cross-subsidies are not common.¹⁰⁸

IV. TAKING CROSS-SUBSIDIES SERIOUSLY

Parts II and III above questioned whether significant cross-subsidies exist, concluding that the evidence is inconclusive at best. Contrary to that analysis, this Part assumes that a significant and pervasive cross-subsidy favoring credit card users does exist. It first analyzes the relative effect of such a subsidy in light of similar imperfections throughout the retail economy. It then suggests types of legislation that would be appropriately tailored to attack the problems about which regulators can be reasonably certain without threatening to disrupt existing payment system markets.

A. *The Cross-Subsidy Phenomenon*

Assuming that a typical merchant accepting credit cards generally raises prices relative to what those prices would have been if it did not accept cards, the incremental amount paid by non-card users might nonetheless be reasonable given prevailing retail pricing practices. Merchants selling at a unitary price virtually always provide penumbral products and services bundled together with their primary wares. For example, when a supermarket, clothier, or home repair store offers shopping carts that only certain customers use, the merchant bears the expense of purchasing and maintaining the carts as well as the cost of hiring laborers to gather them

Gregory Taggart, *Target card or Target Visa? Which is Better?*, BANKRATE.COM, Nov. 30, 2007, http://www.bankrate.com/brm/news/cc/20071130_credit_card_retail_store_a1.asp (explaining that cardholders receive percent off and dollar off coupons) (last visited May 20, 2009); TJX Rewards MasterCard, http://www.firstusa.com/cgi-bin/webcgi/webserve.cgi?partner_dir_name=tjx_choice (last visited May 20, 2009) (offering 10 percent off a first purchase with a rewards MasterCard).

108. Professor Levitin has argued that merchants do not want to incentivize cash use because they benefit from credit cards. Levitin, *Economic Costs*, *supra* note 68, at 1353. They may only wish to discourage the use of certain high fee reward cards. *Id.* at 1353-55. For this purpose, cash discounts are useless. This is a plausible argument, but the gasoline experience in the 1980s provides no support for it, and can fairly be read to cut against the possibility of significant cross-subsidies.

from the parking lot.¹⁰⁹ Like credit card fees, the cost of the carts and the attendant services are blended into the cost of the merchant's goods and are thus borne in part by shoppers who buy just a few items and use a bag or basket. Cart users thus enjoy a subsidy.

Similar amenities—parking, rest rooms, napkins, etc. —are pervasive, but the practice of bundling extends beyond these add-ons to core aspects of the merchant's business as fundamental as the array of products offered. Many merchants carry a variety of goods appealing to different customer groups. To the extent that inventory costs are spread across products, those who never purchase items that are more expensive to inventory subsidize those who buy these high-storage-cost products.

Similarly, a retailer may earn different levels of profit depending on the type of service provided. For example, automobile maintenance shops specializing in oil changes may advertise a low price to change the oil, hoping to convince customers at the point of sale to also buy air filter replacement at a much higher mark up. Customers who only purchase the less profitable advertised services benefit from subsidies paid by those who purchase the more profitable services.

Every sub-group of customer benefiting from some particular merchant expenditure effectively imposes a portion of the merchant's cost of doing business on other groups of customers who do not benefit from that expenditure. At its limit, one might argue that, because small purchases generally impose a greater cost on merchants than large ones, the wealthy, who tend to buy more, effectively subsidize poorer consumers who purchase less.

The pervasiveness of the practice of ignoring these differences and blending costs into unitary prices counsels against the conclusion that a subsidy for credit card use is unreasonable, unless card acceptance expenses differ in some relevant way from other sorts of merchant expenditures.

109. Richard Epstein, *The Regulation of Interchange Fees: Australian Fine-Tuning Gone Awry*, 2005 COLUM. BUS. L. REV. 551, 570 (2005) (stating that reducing the price of any good merely shifts the joint cost to purchasers of other goods) David S. Evans, *Bank Interchange Fees Balance Dual Demand*, AM. BANKER, Jan. 26, 2001, at 17 (“All customers end up paying higher prices as a result of retailers offering parking, tailoring, escalators, convenient store hours, gift-wrapping, and many other amenities that are used by only some customers.”).

B. Attempts to Distinguish Credit Card Cross-Subsidies

Commentators have suggested three ways in which card acceptance may differ from other merchant expenditures. The following sub-sections discuss these claims, concluding that they fail to justify condemning credit card subsidies either because no real distinction exists or because the distinction weighs in favor of preventing merchants from allocating card acceptance costs to card users.

1. Distinguishing Credit Cards Based on the Entity Deciding Whether to Allocate the Cost

Economists have argued that in most cases retailers decide for themselves whether to pass a particular expense on to all customers through a unitary price or only to those customers benefiting from the expenditure.¹¹⁰ For example, if a retailer pays a shipper to deliver goods to a customer, the retailer decides whether to allocate a separate charge for shipping or to provide *free shipping*, which bundles the cost into its general prices. A common practice is to provide free shipping on more profitable larger orders, but to allocate shipping separately for less profitable smaller orders.

Credit cards are different, these commentators claim, because the card systems prohibit retailers from passing on the fee.¹¹¹ A merchant, therefore, cannot choose to surcharge high-priced credit cards, while blending the cost of regular cards into its prices. This argument is overstated and, to the extent that it is valid, the limits that card systems impose may be justified by the unusual economics governing credit card markets.

It is overstated because, although the systems prohibit surcharging, they permit merchants to allocate extra costs to credit card customers. Federal law safeguards cash discounting,¹¹² and many stores offer discounts for consumers who use that store's own credit card.¹¹³ Stores might also offer separate, and fewer, checkout lines for credit card customers or free delivery

110. KATZ, *supra* note 27, at 47 (using example of retailer-provided parking); Frankel & Shampine, *supra* note 26, at 636 n.30 (same).

111. KATZ, *supra* note 27, at 47 (explaining that merchants providing parking, for example, may decide for themselves whether to charge or provide it free, whereas merchants accepting credit cards do not have the choice to surcharge); Frankel & Shampine, *supra* note 26, at 636 n.30 (contrasting credit cards with other sorts of merchant-provided amenities where the "decision[] not to charge differentially [is] typically made by independent, competing firms, not by all providers of, e.g., parking lots").

112. 15 U.S.C. § 1666f (2006).

113. *See supra* note 107.

for those who pay in cash. To be sure, these measures may be less effective and/or more costly than surcharging credit card purchases would be. But retailers do have some options that would enable them to place at least a portion of the cost of credit cards on credit card users if doing so would increase their profits. Most retailers, however, simply choose not to use these available tools.

More importantly, to the extent that the credit card systems do limit the ability to pass costs on to card users, they may be justified. A card system must provide a service to two distinct customer bases, consumers and merchants. In such a two-sided market, efficient pricing generally requires fee setting that diverges from marginal cost pricing for each customer set.¹¹⁴ Just as a newspaper charges advertisers above marginal cost prices so that it can deliver papers to readers at a price below marginal cost, card systems charge merchants higher fees to enable the system to attract cardholders and stimulate card use. If merchants fully allocated the cost of card acceptance to individual card users, the card systems would be *unable* to maintain this potentially efficient pricing model.¹¹⁵ These economic considerations make credit card acceptance fees different from most other merchant expenditures in a way that may justify a prohibition on surcharging.

2. Credit Card Fees Would be Easier to Allocate than Other Amenities

Second, one economist has pointed out that allocating some merchant expenditures to particular customers, parking for example, would be costly.¹¹⁶ The merchant might need to limit access to the lot and hire an attendant. Allocating credit card costs to those customers who use them would, by contrast, entail a relatively small incremental cost after the initial investment.¹¹⁷ Merchants, however, rarely allocate the cost of amenities even where they could do so easily (e.g., shopping carts or bags). Customer resistance to extra charges, rather than administrative expense, may explain

114. Guerin-Calvert & Ordoover, *supra* note 56, at 385 (“The *network externalities* that link merchants who accept cards and card-holders who use them compel a price/fee structure that will likely entail deviations from the cost-causality principles that call for prices to be closely linked to the underlying costs of providing *direct* benefits to either side of the market.”); Michael L. Katz, *What Do We Know About Interchange Fees and What Does it Mean for Public Policy? Commentary on Evans and Schmalensee*, in PROCEEDINGS – PAYMENT CENTER RESEARCH CONFERENCES 121, 126 (2005) <http://www.kansascityfed.org/PUBLICAT/PSR/Proceedings/2005/katz.pdf>.

115. Semeraro, *Antitrust Economics*, *supra* note 27.

116. KATZ, *supra* note 27, at 47.

117. *Id.*

the failure to allocate both the cost of most amenities and credit card acceptance fees.

3. Consumers Can Choose Whether to Use Most Amenities

Finally, one commentator has argued that credit card fees are different from other merchant expenses because consumers can choose whether to use virtually all merchant-provided amenities, but those without a credit card cannot choose to use one.¹¹⁸ Nor can the cardless avoid the cross-subsidy in some other way because almost all retail outlets accept credit cards.¹¹⁹

In many, perhaps most, cases, however, a consumer who does not use a credit card could use one. Virtually anyone can get a credit card.¹²⁰ Many, even among those who have cards, simply choose not to use them for a host of reasons, including philosophical objections, budget planning, avoiding interest, masking a record of the purchase, and whim. In these cases, credit card acceptance is no different from other merchant-provided amenities.

The argument that some consumers have no choice in the matter also begs the question of what counts as a choice. Some of those who are unable to use a credit card at the point of sale are in that position only because they have tapped out the credit limits on their cards. The particular choice at the moment of a purchase decision is not privileged over earlier choices that may account for the individual's current inability to use a credit card.

Some consumers, however, may have their choices limited as a practical matter even if they could theoretically obtain a credit card. A significant percentage of American consumers, including many of the poorest, have no banking relationship whatsoever.¹²¹ Lack of information and the irrational

118. Levitin, *Social Costs*, *supra* note 10, at 34-35.

119. *Id.*

120. *Id.* at 14 (“[A]lmost anyone who wants a rewards card can get one.”). Even individuals who have recently declared bankruptcy have no problem obtaining credit cards, though many choose not to. Katherine Porter, *The Debt Dilemma*, 106 MICH. L. REV. 1167, 1170 (2008) (reviewing RONALD J. MANN, CHARGING AHEAD: THE GROWTH AND REGULATION OF PAYMENT CARD MARKETS (2006)) (“[N]early every consumer has access to a credit card. Card issuers have used price differentiation and technology to offer cards to nearly every segment of the market, a strategy that banks have not deployed for many conventional lending products.”); *id.* at 1181 (“[T]he rampant marketing of credit cards to families after bankruptcy means nearly everyone can get a credit card.”).

121. Levitin, *Social Costs*, *supra* note 10, at 36; JAVIER SILVA & REBECCA EPSTEIN, DEMOS: A NETWORK FOR IDEAS & ACTION, COSTLY CREDIT: AFRICAN AMERICANS AND LATINOS IN DEBT 3 fig.1 (2005), <http://archive.demos.org/pubs/Costly%20Credit%20final.pdf> (using data from 1992-2001 and showing that 82% of whites held credit cards, compared to only 59% of blacks and 53% of Latinos); *Study Shows Card Use Linked to Race*, CARDLINE,

fears that ignorance breeds may be responsible for keeping many of these individuals outside the banking system. In addition, some evidence suggests that banks overtly discriminate against certain groups.¹²² As a result, many in the unbanked community have no practical access to a credit card.

For this group, the RRHCS, if it exists, seems stunningly unfair, but sadly, not unusual. Low-income consumers suffer in a host of ways vis-à-vis those with higher incomes. Parking, for example, the quintessential merchant-provided amenity is often blended into purchase prices and can only be enjoyed by those with cars. The carless, like the cardless, come disproportionately from low-income and minority groups.

C. Appropriate Legislative Responses to Reverse-Robin-Hood Cross-Subsidies

To say that cross-subsidies favoring the wealthy are not unusual is *not* to say that they should be ignored. But some perspective is necessary. The unbanked, by definition, lack access to all banking services, causing them to suffer a host of financial disadvantages that are likely to be far more serious than paying a less-than-one-percent cross-subsidy because they pay in cash. Imagine the expense of paying utility bills in person with cash or money orders because one lacks access to a demand deposit account and thus cannot write checks.

Professor Levitin suggests that “only Congress can solve the merchant restraint problem cleanly, neatly, and completely by passing legislation that guarantees merchants the right to decide which payment products within a brand they wish to accept and the right to choose the prices they charge for payment acceptance.”¹²³ He recognizes that such a regulation could reduce or eliminate credit card reward programs, but he would view that as a positive development because the rewards are funded in part through the RRHCS.¹²⁴

The problem with this solution is that it may do more harm than good. First, as explained above, the feared cross-subsidy may not exist. If that is true, then credit rewards serve a valuable function in stimulating card use

May 24, 2005, <http://www.cardline.com> (website subscription required) (citing a study based on data from the Federal Reserve’s Survey of Consumer Finances for the years 1992-2001).

122. See generally Ethan Cohen-Cole, *Credit Card Redlining* (Fed. Reserve Bank of Boston Quantitative Analysis Unit, Working Paper No. QAU08-1, 2008), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1098403 (suggesting that credit card issuers discriminate in the marketing of credit cards).

123. Levitin, *Social Costs*, *supra* note 10, at 57.

124. *Id.* at 57-58.

that effectively benefits all consumers. Encouraging merchants to surcharge could undo that benefit. Second, even if there is a cross-subsidy, permitting surcharging may have little impact and cause problems of its own. Merchants in competitive industries may avoid surcharging, just as they have refused to implement cash discounting schemes, because of the costs and likely customer backlash.¹²⁵ Merchants with market power, by contrast, would likely surcharge to usurp card system market power. But these merchants may push the surcharge beyond the level of any cross-subsidy and retain the excess as profit rather than lowering their prices.¹²⁶ Whether low-income and unbanked individuals would be better off in such a regime is anybody's guess.

A more fruitful regulatory response may be to adopt a two-pronged approach. On the one hand, informational programs could educate the unbanked about the availability and safety of banking services, including credit cards. On the other hand, Congress could enhance enforcement efforts to root out and punish discriminatory activities in banking services and provide incentives to financial institutions to reach out to the unbanked.

Those who are currently outside the system may benefit far more from banking services, including credit cards of their own, than from eliminating a cross-subsidy that may not exist. Credit cards have very low or even negative costs to cardholders who do not run balances. The means of payment used today by those with no banking relationship, principally cash and money orders, impose significant costs that extend well beyond cross-subsidies. The risk of uninsured loss through theft or otherwise is significant. In addition, while most checking accounts now impose no fees for depositing or writing a check, pay-check cashing outlets, and those that sell money orders, impose substantial fees. And, of course, using these services is time consuming. Lastly, when the need to purchase on credit arises, an unbanked consumer is generally limited to expensive "payday" loans, the rigors of the pawn shop, or worse. Access to a credit card for unbanked individuals would reduce or eliminate these costs in addition to any harmful cross-subsidy that may exist.

Along with these efforts to move the unbanked into the banking system, Congress should enact legislation that targets particularly egregious unfairness in ways that would not disrupt well-functioning payment system markets. For example, food stamps could be provided through a specific type of cash card that paid the user a rebate in an amount roughly equal to any

125. Semeraro, *Antitrust Economics*, *supra* note 27.

126. *Id.*

feared cross-subsidy.¹²⁷ This amount could be automatically deposited into an interest bearing savings account and made available for withdrawal after a waiting period. Card issuers could also be required to offer charge cards to all with an interest-free float period, but no revolving balance option, for customers worried that they would abuse a high credit limit or the ability to pay over time. Finally, credit card rewards could be taxed as ordinary income.¹²⁸

CONCLUSION

In the end, it is quite difficult to make the case that surcharging must be permitted to right a social wrong inflicted on those who do not use credit cards. And given the economics of two-sided markets, permitting surcharging is far from a risk free way to combat the anticompetitive effects of interchange fees. By contrast, the legislation proposed here would likely provide more certain and valuable assistance to the unbanked without the risks of disrupting existing credit card markets.

127. Levitin, *Social Costs*, *supra* note 10, at 36-37. Certain credit cards today deposit money directly into a savings account. So, the systems necessary for such a card already exist.

128. *Id.*