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I. Introduction

The skyrocketing bankruptcy filing rates of recent years are well known. Last year over 1.3 million families filed for bankruptcy. Amazingly, that figure actually represented a slight *drop* from the previous year. Anxious to deflect blame from an overly generous bankruptcy system or a decline in the shame and stigma traditionally associated with filing bankruptcy, opponents of bankruptcy reform have fingered promiscuous lending practices by credit card issuers as the primary culprit in the bankruptcy boom.[1] In particular, it is charged that, spurred on by high profits, credit card issuers have extended increasing amounts of credit to ever-riskier borrowers. If this is so, then the credit card companies have no one to blame but themselves when these borrowers default on their obligations, file for bankruptcy, and impose losses on lenders. For similar reasons, some bankruptcy judges have frowned upon dischargeability

[1] *See* Edith H. Jones & Todd J. Zywicki, *It's Time for Means-Testing*, 1999 BYU L. REV. 177, 224-28 (1999) [hereinafter Jones & Zywicki].

objections by credit card issuers. Moreover, it is said to be the height of hypocrisy for these same credit card issuers to then turn around and demand tighter bankruptcy laws to bail them out of this problem of their own making. Finally, it is argued that because these losses simply come out of the "profits" of credit card issuers, bankruptcy simply results in a wealth transfer from lenders to borrowers and no resultant efficiency loss for other consumers.

But this theory rests on a substantial number of questionable assumptions about nature of the credit card market and about the nature of rational credit card use by consumers. It assumes a persistent failure of competition in the credit card market, despite the existence of thousands of firms, low barriers to entry, and high levels of dynamic competition during the very period that high profits supposedly persisted. It further assumes a remarkable degree of consumer irrationality, requiring consumers to underestimate their credit card bills – and only their credit card bills and none of their other financial obligations – month after month and year after year. It requires assuming that consumers never become more intelligent about their options, despite billions of dollars spent by credit card companies to inform consumers of the different product options that are available to them. It requires a belief that the *sole* indicium of competition in this market is the responsiveness of credit card interest rates despite the fact that only a minority of credit card users revolve balances from month to month. The thesis requires assuming that credit card users are homogenously concerned *only* about interest rates and not about any other term of the credit card contract, whether benefits, grace periods, or annual fees. In short, for the argument to be plausible, it requires a series of heroic assumptions about persistent profits in a market with low barriers to entry, a failure of competition in a market with all structural indicia of competitiveness, a peculiar and extraordinarily narrow definition of the

indicia for measuring competition, and a failure of consumer rationality in a situation where there are strong incentives for consumers to act rationally and to learn over time.

Alternatively, it could be argued that the credit card market is competitive and that consumers use credit cards rationally. As this article will show, both credit card issuers and consumers appear to act in a manner consistent with the predictions of economic theory. It is not necessary to rely on implausible assumptions about consumer irrationality or to devise idiosyncratic models of a failure of competition in the credit card market. This article will present voluminous empirical evidence – most of which has heretofore been ignored in the legal literature – demonstrating that the operation of the credit card market and consumer choice is consistent with rational decision-making subject to constraints. This article will show that credit card users are not homogenous indeed, it will show that most credit card users will be largely indifferent to interest rates, and that this indifference is rational. Moreover, this suggests that there is some efficiency loss as a result of bankruptcy, and that at least some of the losses of credit card issuers are absorbed by other consumers.

As this paper will show, the analytical premises that underlie the purported link between credit cards and bankruptcy are suspect. There are simply too many holes in the story and too many implausible assumptions that undercut the proffered link. Because these factual predicates are necessary for the argument against credit cards to succeed, their failure brings the whole edifice of the purported credit cards—bankruptcy link down with it. Without an explanation for long-term, persistent economic profits there is no basis for assuming that credit card issuers will continue to expand credit to ever more risky borrowers. Without an explanation for long-term,

persistent consumer irrationality then the entire explanation for economic profits collapses. And, in fact, it turns out that the purported link itself is bereft of empirical support.[2]

This is not to deny that there may be abuses in the credit card market, as with any lending market, that require further disclosure or other forms of substantive consumer protection regulation. If so, then those proposals should be considered and dealt with on their merits. I offer no opinion on that issue here. But issues of abuse and inadequate disclosure are separate from issues related to bankruptcy. Tying credit card regulation to bankruptcy reform confuses two distinct issues and risks simultaneously disfiguring both bankruptcy law and credit card regulation. Bankruptcy is at the periphery, not the center, of the debate over credit cards.

Finally, too many bankruptcy policy-makers and judges have been distracted by the erroneous model that dominates current discussion on the topic of credit cards and bankruptcy, leading to ill-advised legislative reform proposals and confused judicial decision-making. If enacted, these policies will have little negative impact on the upper-middle class academics, judges, and lawyers who propound them but who also can easily escape their reach. On the other hand, these policies could have dramatic negative consequences for vulnerable low-income consumers who lack the borrowing options of wealthier individuals and as a result may be driven back into the hands of pawnbrokers, rent-to-own financiers, and loan sharks who flourished prior to the deregulation of the credit card market. A proper understanding of the economics of credit cards is necessary for a proper understanding of the root causes of the bankruptcy crisis.

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[2] *See infra* notes 263-92 and accompanying text (presenting brief discussion of the purported link between credit cards and bankruptcy). A full critique of the purported link between credit cards and bankruptcy is

II. Modeling Credit Card Use by Consumers

Credit cards perform two functions.[3] First, they may be used as a transactional medium, as a substitute for cash and checks. Second, they may be used as credit, as a substitute for other forms of short-term, small-dollar value credit, such as layaway plans, pawn shops, and short-term bank loans. Bankruptcy commentators have largely focused on the latter use, decrying the seemingly high interest rates of credit cards as a form of credit and using this as evidence of consumer irrationality and lender exploitation. Both this focus on credit cards primarily as a form of credit, and the conclusion that such use is irrational, are incorrect.

A. Credit Cards as a Transactional Medium

The primary use of credit cards today is as a transactional medium, not as a source of credit. Over half and probably as much as 68% of credit card users should be considered "convenience users," who use credit cards primarily as a transactional medium and who pay off their balances in full each month.[4] Moreover, convenience use of credit cards is rising much

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presented in Todd J. Zywicki, Credit Cards and Bankruptcy (Aug. 28, 1999) (unpublished manuscript on file with author at George Mason University School of Law) [hereinafter Zywicki, Credit Cards].

[3] *See* Dagobert L. Brito & Peter R. Hartley, *Consumer Rationality and Credit Cards*, 103 J. POL. ECON. 400, 401 (1995).

[4] *See* Thomas F. Cargill & Jeanne Wendel, *Bank Credit Cards: Consumer Irrationality versus Market Forces*, 30 J. CONSUMER AFF. 373, 379 (1996) [hereinafter Cargill & Wendel] (noting that 68% of users "nearly always" pay their full balance every month); Randall J. Pozdena, *Solving the Mystery of High Credit Card Rates*, 42 FRBSF WEEKLY LETTER 1 (1991) (stating "over half" of card users do not revolve debts); *Delinquency on Consumer Loans: Hearing Before the House Comm. on Banking and Fin. Servs.*, 104th Cong. 1 (1996) [hereinafter Crone, *Delinquency*], (testimony of Kenneth Crone) ("[M]ore than half of the usage of bankcards is for 'convenience' use only, which is paid off immediately, without revolving."); Glenn B. Canner & James T. Fergus, *The Economic Effects of Proposed Ceilings on Credit Card Interest Rates*, 73 FED. RES. BULL. 1 (1987) [hereinafter Canner & Fergus]. "In 1983, as in 1977, about half of families that used bank or retail credit cards stated that they nearly always paid their bills in full each month . . . . Such consumers can be considered convenience users." *Id* at 5; LEWIS MANDELL, THE CREDIT CARD

faster than revolving use of credit cards, increasing 20% in one year alone.[5] According to a recent Visa study it is also estimated that "almost 60 percent of total bankcard volume generates no interest, up from roughly 50 percent six years ago."[6]

The high rate of convenience use of credit cards relative to revolving use reflects the attractiveness of credit cards as a transactional medium. This attractiveness stems from two basic sources. First, credit cards enable individuals to minimize their cash balances, thereby allowing them to shift their assets into higher-return investments. Second, there has been an explosion in consumer demand for credit card use, largely as the result of the convenience of using credit cards as a mechanism for conducting transactions.

In any given transaction, a consumer will have any number of options as to how to pay for the purchase.[7] Consumers will choose their transactional medium according to the relative costs and benefits of using one method over another. Three basic forms of transactional media are available: cash, direct claims against a bank (checks or debit cards), or credit cards. The attractiveness of credit cards relative to these other media explains the rise of credit cards as a dominant method of making transactions.

INDUSTRY: A HISTORY 139 (1990) (noting that by the late 1980s the proportion of users who paid in full each month was approximately 50%, a figure that had remained relatively constant since 1970). *But see* Lawrence M. Ausubel, *The Failure of Competition in the Credit Card Market*, 81 AM. ECON. REV. 50, 71 (1991) [hereinafter Ausubel, *Failure of Competition*] (noting that three-quarters of credit card users revolve balances). However, this assertion is simply incorrect. For a discussion of the various errors that Ausubel committed in calculating this figure, see Cargill & Wendel, *supra* at 379-80.

[5] *See* Crone, *Delinquency, supra* note 4, at 1 (ascribing the rise in convenience to use to a growth in the number of retailers accepting credit cards and the popularity of co-branded cards among consumers); *see also* Pozdena, *supra* note 4 (noting that the use of credit cards as a payment device is growing at a rate of about 10% per year and the amount of credit card debt outstanding is growing at only 6% per year).

[6] Crone, *Delinquency, supra* note 4, at 1.

1. Cash

A consumer can use cash. Obtaining and using cash to finance transactions has very few benefits in the modern era relative to the alternatives. There are also substantial transaction costs associated with acquiring cash, most notably the requirement to actually go to the bank to withdraw it. Although this cost has declined with the spread of automatic teller machines (ATMs), withdrawals from the ATMs of other banks requires the payment of a fee. Overall, the transaction costs of obtaining cash at the margin makes cash relatively less attractive than alternatives that do not require this.

Cash is also unattractive as a primary transactional medium in that it earns no interest when it is in your wallet. Indeed, because of inflation, cash carried in your wallet earns a negative rate of return.

Cash also has limited utility for conducting many transactions. For instance, cash cannot be used to pay bills or make purchases through the mail. Other cash transactions require the creation of a formal receipt to memorialize the transaction.

Cash does have some benefits for some transactions. Cash provides anonymity, whereas checks and credit cards do not. It seems doubtful, however, that the desire for anonymity will be very high in many cases.

Thus, it seems that cash will be the preferred purchasing mechanism only for extremely low-value transactions: lunch, a newspaper, or a cup of coffee. In those cases, cash provides a speedy way of effectuating a small transaction. One need not carry large cash balances to

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[7] *See* also DAVID S. EVANS & RICHARD L. SCHMALENSEE, THE ECONOMICS OF THE PAYMENT CARD INDUSTRY 5-15 (1993) [hereinafter EVANS & SCHMALENSEE] (giving a similar discussion to that presented here).

engage in these transactions and the speed and convenience of cash is desirable. Even in 1976, before the rise of credit cards and electronic commerce, cash was used primarily only for small transactions.[8] Larger transactions at that time were conducted by checks. Credit cards were in small use and "[d]ebit cards were essentially nonexistent."[9] Today, cash continues to be used primarily for small transactions and thus is not really a very useful transactional medium for many transactions.[10]

In recent years, credit cards have increasingly become an effective cash substitute. This is primarily the result of technological advancements that have increased credit card processing speed.[11] As a result, credit cards are now accepted in such places as fast food restaurants, coffee shops, parking garages, supermarkets, movie theaters, and taxi cabs.

A recently evolved alternative to cash has been the spread of "debit cards." Debit cards provide an electronic confirmation of sufficient funds at the time of the transaction. Until recently, debit cards were still rarely used, but now their use has started to rise. Somewhat surprisingly, however, debit cards appear to be a substitute for cash rather than checks, as their use has grown most in venues such as grocery stores and gas stations.[12] This development is probably the result of increased processing speed of new electronic processing mechanisms.

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[8] *See* Kenneth E. Scott, *Electronic Commerce Revisited*, 51 STAN. L. REV. 1333, 1339 (1999).
[9] *Id*.
[10] *See* Jonathan R. Macey & Geoffrey P. Miller, *Nondeposit Deposits and the Future of Bank Regulation*, 91 MICH. L. REV. 237, 252 (1992) (noting that transactions that cannot be effectuated by credit card "are usually either very small, in which case the consumer can settle accounts with case, or very large, in which case the consumer can pay by means outside the banking system, such as by drawing a check on a mutual fund").
[11] EVANS & SCHMALENSEE, *supra* note 7, at 86-87.

2. Checks

Checks have traditionally served as the primary transactional mechanism for larger consumer purchases. One suspects, however, that this primacy has been by default – there were many transactions for which cash was simply not a viable alternative, and hence were conducted by check. These include paying bills by mail and making larger purchases for which one did not want to carry cash balances on one's person. Again, using 1976 as a benchmark, although 66% of transactions at that time were conducted by cash, over 90% of dollar payments were carried out by checks.[13] Because checks were a higher-transaction cost medium, they were used primarily for larger-value purchases that justified using these higher transaction-costs.

The problem with checks, however, is that they are fundamentally in the nature of a credit transaction.[14] By writing a check, an individual is representing that she has sufficient funds to cover the check when it is drawn. The merchant, however, has no way of confirming this fact at the time the check is written. Moreover, even if there are sufficient funds at the time the check is written, there may not be sufficient funds at the time the check goes to the bank to be cleared. As a result, merchants suffer potentially large risks of non-payment from the use of a check. Merchants can do little *ex ante* to reduce this risk.

There also is little reason to believe that individual retail merchants are in the best position to monitor or bear the risk of non-payment of checks. Merchants have a comparative advantage in bearing the risk of quality defects with respect to some of the goods they sell.

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[12] *See* Scott, *supra* note 8, at 1339.
[13] *Id*.

However, it is doubtful that retailers have any comparative advantage in bearing the risk or monitoring that a consumer will fail to make good on a check that is written. They may have the ability to "spread" some of their losses onto other buyers, but even this will be limited in a competitive market. Moreover, it is likely that these losses will fall heavier on small businesses, which will have less ability to spread them over their lower sales volumes. Casual empiricism tends to support this, suggesting that small merchants are less likely than larger merchants to accept personal checks. It is difficult to imagine that they can really do much to ensure that funds sufficient to cover a check will actually be available some days later when the check is drawn against the writer's account. As a result, forcing merchants to bear this risk does not seem efficient in any way. Credit cards enable merchants to shift the risk of a bounced check and consumer default to a lower-cost risk-bearer, a bank or financial institution, that can monitor such risks.[15]

To minimize this risk, and to increase the reliability of the consumer's promise to pay, laws have established several deterrence schemes. In addition to giving the merchant a claim against the check-writer for damages, some states allow presentation of checks without sufficient funds to be the basis for criminal penalties. At the very least, banks and merchants assess a penalty of $20 or more for bouncing a check. These penalties are necessary because of the status of a check as essentially a credit transaction, where a consumer is making a naked promise to pay for goods or services and the seller has no ability to verify the credit-worthiness of the buyer with respect to that transaction.

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[14] *See* Notes of Committee on the Judiciary, Senate Rep. 95-989 (1978) ("Normally, a check is a credit transaction.").

In recent years, checks have yielded to credit cards as a medium of exchange for larger-value, especially retail, transactions. Thus, while cash and checks are still used in roughly 95% of all payment transactions, they constitute only 77% of the total dollar value of transactions.[16] "The greatest growth (in terms of dollar value) has come in credit cards, which doubled from ten to twenty percent of the total between 1975 and 1995, reducing the share of checks accordingly. Cash held its own, and debit cards have made hardly a dent."[17] This erosion is expected to continue in the future. By the year 2005 it is predicted that only 29% of transactional dollar volume will be conducted by check, while credit card volume is expected to rise to 28%. Debit cards are expected to rise to 20% of volume and direct electronic transfers to 11%. Cash transactions are also expected to fall to 12% of volume, as electronic cash-substitutes become more popular.

Thus, while cash retains its appeal for small transactions, the reduction in transaction costs of using credit cards has caused them to supplant checks as a mechanism for conducting larger and non-face-to-face transactions. Consistent with the predictions of economic theory, it appears that rational consumers have consciously decreased their use of checks and increased their use of credit cards as the latter medium has become more attractive as a means of financing current purchases.

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[15] *See* EVANS & SCHMALENSEE, *supra* note 7, at vii.
[16] *See* Scott, *supra* note 8, at 1339.
[17] *Id*.

3. Credit Cards

Recent decades have seen a massive expansion in the use of credit cards as a transactional medium. Some commentators have incorrectly ascribed this explosion to the efforts of deregulated card issuers to "push" credit cards on unsuspecting consumers. This argument lacks merit and will be discussed in some detail below.[18] A more plausible explanation for the rise of credit cards as a transactional medium is their convenience and the other benefits they offer.[19] In particular, credit cards have increasingly supplanted checks as the preferred medium for transactions traditionally conducted by check. Thus, it is likely that the explosion in consumer demand for credit cards is the result of rational consumer choice, rather than improper creditor action.

Credit cards offer two transactional advantages over cash and checks. First, unlike cash and checks, credit cards make it unnecessary to maintain cash reserves sufficient at all times to cover current expenditures.[20] Second, credit cards offer several ancillary benefits unavailable to cash and credit cards.

Credit cards provide flexibility for consumers in matching their income and expenditure streams by alleviating the need to maintain sufficient funds at all times to cover current expenditures. Rather than necessitating an ongoing maintenance of cash balances, credit cards necessitate holding only enough cash to cover a check to pay the credit card bill once a month.

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[18] *See infra* notes 231-65 and accompanying text.
[19] *See* Jones & Zywicki, *supra* note 1, at 229 ("Theories whose validity depends on the assumption that consumers are stupid about their money ought to arouse suspicion. And, unsurprisingly, a more plausible explanation is available.").
[20] Brito & Hartley, *supra* note 3, at 401.

It is only when that single check is presented for clearance that the consumer must ensure that she has sufficient funds to honor the check.

The simple convenience of being able to make a purchase today without having to worry about the exact amount of funds available makes credit cards a convenient transactional medium. The convenience of credit cards is illustrated by an example provided by Brito and Hartley. They estimate that if bank accounts are earning a real interest rate of 4.2% annually (higher than most money market and passbook accounts today), and credit card balances accrue interest at 19.6% annually (several points higher than the prevailing norm today), and credit cards begin to accrue interest immediately when charges are made (which is rarely the case because most cards do not charge interest until after the close of the credit cycle and the end of a subsequent grace period), credit cards would still be predicted to be used to finance about 23% of consumer transactions.[21] As suggested, this number certainly understates the real-world percentage of transactions rationally financed by credit cards, as it overstates the attractiveness of holding money balances, overstates the interest rate on credit cards, and unrealistically assumes that balances begin to accrue interest immediately. Adjusting for these assumptions, the large number of convenience users in the population should not be surprising.

Credit cards also permit consumers to carry interest-free balances for almost two months, as the cardholder can carry the balance interest-free not only during the credit cycle, but even for a "grace period" of twenty or more days after the credit period ends. Transactional users can avoid all interest charges by paying off the balance at the end of the

[21] *Id*. at 406.

period.[22] By contrast, the credit card issuer carries an open, zero-interest account for this entire period.[23]

Cash and checking accounts usually produce no or little interest; as a result, consumers will seek to minimize the amount of time that their money sits in their wallets or in low-interest checking accounts. Given the low interest rates of recent years, money market and checking accounts have provided trivial rates of interest, and cash in your pocket earns a negative rate of return because of inflation. By contrast, investments in the stock market and other investment opportunities have provided very high rates of return. Given these high rates of return elsewhere in the economy and the low rates of interest paid on cash balances in money market and checking accounts, the opportunity cost of holding cash balances in recent years has been extremely high. As a result, the opportunity to hold cash balances at a minimum amount has been extremely attractive to consumers.

Indeed, it seems misleading to think of these convenience users of credit cards as engaging in "credit" transactions at all. If a debtor intends to pay-off the debt at the end of the month and in fact does so (as do the vast majority of credit card users), then this is no more a credit transaction than is writing a check. In both cases, the purchaser is simply obtaining the goods now and paying for them later. Those concerned with the growth in the number of "credit transactions" that take place using credit cards ignore the fact that most of these transactions are fundamentally no different from the time-honored practice of writing a check.

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[22] *Id*. at 401.

[23] *See also* Donald D. Hester, *Monetary Policy in the "Checkless" Economy*, 27 J. FIN. 279, 285-86 (1972) ("[T]he charge card allows [its owner] to shift the burden of carrying zero-interest-bearing transaction balances from himself to those issuing the card for at least a month. With a charge card he can reduce his demand account balance[s] . . . [and] it is less important to waste time and effort trying to minimize them.").

As suggested above, checks and convenience use of credit cards should be thought of consistently. In this context it is also important to remember that a majority of card users pay their balances in full each month, suggesting that consumers are primarily using credit cards as a substitute for checks rather than as a source of credit.

Indeed, it is difficult to understand why the bankruptcy and legal community treat credit card obligations differently from checks. Both credit cards and checks represent a promise to pay. Outside bankruptcy, a breach of this promise can have similar consequences for the individual. For instance, the failure to pay-off a balance on a credit card can result in interest and finance charges. But the failure to hold funds sufficient to honor a check (i.e., the check "bounces") can also result in substantial financial charges and other penalties. In some states, the failure to hold funds sufficient to honor a check can result in criminal penalties in certain situations. I am unable to discern a principled distinction as to why the legal promise to honor a credit card obligation should be excused so readily while the obligation to honor a check is unquestioned.

Indeed, the similarity does not end there. Some commentators have criticized credit card issuers on the ground that they are to blame for granting excessively high "pre-approved" credit limits to borrowers. But is this really any different from a bank that sends you a stack of blank checks upon opening a bank account?[24] Everyone knows that you are only supposed to write checks if you have adequate funds to honor them. The burden is on the check-writer to be responsible to make sure that she has sufficient funds to honor the check – it is not the bank's responsibility. Again, it is hard to see how this responsibility changes when an individual

uses a credit card to pay for the purchase, rather than a check. In both cases, the individual is promising to honor the obligation with sufficient cash revenues when the appropriate time comes.[25]

Although most people use credit cards as a substitute for checks, credit cards do give these users the option of revolving some or all of their debts if necessary or desirable. This flexibility is unavailable from checks or cash, further adding to the attractiveness of credit cards as a transactional medium.

Credit cards also offer a number of ancillary benefits unavailable from cash or checks. Credit cards are far safer from theft than is cash, explaining the growing popularity of credit cards among the elderly.

Credit cards are also extremely useful for travel, especially in foreign countries. The ubiquitous acceptance of credit cards throughout North America and Europe make credit cards an indispensable medium for reserving hotels, plane tickets, and the like.[26] Car rental companies require a credit card before renting a car.[27] By contrast, merchants are reluctant to accept out-of-state checks.[28] The ease of credit card use for traveling makes traditional "traveler's checks" seem laughably inefficient by comparison.[29]

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[24] *See* Jones & Zywicki, *supra* note 1, at 235.
[25] LA Capitol Federal Credit Union v. Melancon (*In re* Melancon), 223 B.R. 300 (Bankr. M.D. La. 1998).
[26] Glenn B. Canner & Charles A. Luckett, *Developments in the Pricing of Credit Card Services*, 78 FED. RES. BULL. 652, 655 n.8 (1992) [hereinafter Canner & Luckett].
[27] Check cards are not an acceptable alternative in this instance, because of the possibility that the account might be emptied by the lessee, or that the account balance might simply be insufficient to cover the cost of the transaction.
[28] *See* EVANS & SCHMALENSEE, *supra* note 7, at 12.
[29] *Id.*; Jane Adler, *Should You Leave the Card at Home?* CREDIT CARD MGMT., June 1, 1999, at 89.

The competitive pressures of the credit card market have also encouraged card issuers to offer a stream of ancillary benefits highly-coveted by consumers.[30] Many companies award frequent flyer miles and "bonus points" that can be redeemed for goods and services. Most major credit card issuers offer 24-hour customer service, a popular option for time-strapped families who often cannot accommodate their schedules to traditional "bankers' hours." Customers can also use credit card services to challenge sums due on defective merchandise. Indeed, some cards even offer purchase insurance if a product does turn out to be defective. Cards provide a year-end listing of purchases, itemizing them by category for budget-planning purposes and identifying potentially tax-deductible charges.[31] Car rental insurance, travel agent services, and a variety of other services round-out the menu. For those less interested in such frills, Discover Card gives it users cash rebates on the amounts charged. Cash, checks, and check-cards offer nothing approaching this wide range of benefits.[32]

The comparative advantage of credit cards over traditional purchasing media is even greater in light of the fact that credit cards are the *only* viable alternative for conducting many transactions. For some transactions, such as catalogues, Internet sales, and phone orders, credit cards are essential.[33] These sectors of the retail market are the growing very rapidly and have proven to be very popular with the public.[34] As Lewis Mandell observes, credit cards

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[30] The high degree of competition in the credit card industry and the effect it has had on the industry's profitability and operation is discussed in greater detail *infra* at notes 174-230 and accompanying text.
[31] Canner & Luckett, *supra* note 26, at 655 ("The growing share of consumer expenditures completed by credit cards attests to the advantages of this means of conducting transactions, including convenience, safety, automatic recordkeeping, and, in most cases, an interest-free grace period for settling accounts.").
[32] *See also* Canner & Fergus, *supra* note 4, at 7 (noting a similar list of benefits).
[33] Diane Ellis, *The Influence of Legal Factors on Personal Bankruptcy Filings*, *in* BANK TRENDS at 9 (Department of Ins., FDIC No. 98-03, 1998).
[34] *See* Scott, *supra* note 8, at 1333.

"have become an essential element of daily life. With a credit card, you can buy yourself a new car. Without it, you cannot even rent one."[35]

These benefits have been combined with other innovations that further increase the convenience of credit cards relative to the alternatives, such as the opportunity at gas stations to "pay-at-the-pump." Moreover, increases in computing speed has made approval of charge requests virtually instantaneous. Finally, cash advances are now available at almost every ATM machine.

The advantages to consumers of using credit cards is matched by similar advantages to merchants. As noted above, a problem with checks is that they force retailers to bear the risk of nonpayment, a risk that the retailer is unlikely to be in an optimal position to bear. Credit cards allow the retailer to shift this risk of nonpayment to the credit card issuer, a financial institution that has superior risk-bearing and monitoring capability. Casual empiricism suggests that checks have maintained their dominance as a transactional medium primarily in areas where risk of nonpayment is extremely low, such as payment of utility bills. This suggests that the risk-shifting function of credit cards is less necessary in those situations; thus, those vendors will be reluctant to pay the fees associated with use of credit cards.

This ability to shift the risk of nonpayment will be especially important for smaller businesses that will be at a comparative disadvantage in bearing this risk of nonpayment relative to larger businesses. Thus, it is not surprising that credit cards were originally created by large department stores. Large retailers could afford to make the up-front investments associated with setting-up and running a system of customer credit and could bear the risk of

[35] MANDELL, *supra* note 4, at xi.

noncollection.[36] By combining credit operations with retail merchandising, department stores retailers could bury their credit costs in the price of their goods and services by spreading the costs across many transactions.[37] Large retailers such as Sears, Montgomery Wards, and J. C. Penney used credit card operations as a means to facilitate sales and to ensure customer loyalty.[38] As a result, they accepted little profit or even losses on their credit operations in furtherance of these larger goals.[39]

The rise of Visa and MasterCard, therefore, has been most valuable for small retailers, by allowing them to compete on equal terms with the retail behemoths such as Sears. The development of a consumer credit network independent from any single retail establishment has enabled retailers to separate the credit transaction from the retail transaction. This has allowed small retailers to shift the risk of nonpayment to large financial institutions with a comparative advantage in bearing the risk of non-payment and monitoring account-holders. Rather than being forced to bear an uneconomical up-front investment in creating and maintaining a credit operation, small retailers could pay a fee to the card issuer for the transaction.[40]

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[36] Christopher C. DeMuth, *The Case Against Credit Card Interest Rate Regulation*, 3 YALE J. ON REG. 201, 238 (1986).

[37] *Id*.; MANDELL, *supra* note 4, at 23-24. *See infra* at notes325-31 and accompanying text (suggesting that burying the cost of credit in goods and services also enabled Sears and other department stores to evade usury restrictions).

[38] *See* MANDELL, *supra* note 6, at xvii-xviii; *id*. at 48.

[39] For similar reasons of trying to establish brand loyalty, gas cards have generally been money losers for oil companies. Indeed, their costs go into the marketing budget. *Id*. at 102.

[40] *Id*. at xviii ("Small retailers were precluded from running their own credit operations because of the high costs; since they catered to a clientele that bought many consumer goods on credit, it made sense for them to accept third-party cards. Furthermore, many small retailers, particularly the specialty stores, had little need to ensure the loyalty of customers who visited their shops only occasionally."); *id*. at 94; EVANS & SCHMALENSEE, *supra* note 7, at vii; *id*. at 14. One news report discusses a dentist who says that if he did not take credit cards, he would have to provide credit to some patients or lose their business. Barry Flynn, *Credit Cards Nick Small Stores*, RALEIGH NEWS & OBSERVER, June 2, 1999, at D1 ("In that case, the costs in bad debt and record-keeping probably would be far greater than the expense of accepting credit cards, he said.") *available in* 1999 WL 2753869.

Shifting the risk of nonpayment to low-cost risk bearers has encouraged entrepreneurial growth, making it easier for small companies to compete with large retailers who used to dominate the retail credit market.[41] Most notably, the successful creation and growth of small, low-overhead Internet, computer, and catalogue businesses in recent years is hard to imagine without the spread of credit cards as a purchasing mechanism.[42] Thus, the development of credit cards has benefited consumers indirectly as well, by encouraging entrepreneurship and permitting small retailers to compete with larger established retailers. Evans and Schmalensee have summarized the mutual benefits of credit cards stating: "The transaction features of payment cards provide real economic benefits. Consumers gain from increased convenience. Businesses gain from reduced risk. Both gain from transactions that are made easier to consummate."[43] Finally, credit cards can protect consumers from bearing the risk of non-performance by start up businesses.[44]

In light of this manifest evidence of consumer rationality in the use of credit cards, the obvious transactional advantages of using credit cards, and the efficiency gains of credit cards, the hostility of bankruptcy commentators to credit cards is puzzling. Credit cards are arguably the most important and valuable pro-consumer innovation of the past few decades, and among the most important of all time.[45] Through the creation of Internet, catalogue, and phone

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[41] DeMuth, *supra* note 36, at 238.
[42] Jones & Zywicki, *supra* note 1, at 241; EVANS & SCHMALENSEE, *supra* note 7, at 12.
[43] EVANS & SCHMALENSEE, *supra* note 7, at 13.
[44] *See* Todd J. Zywicki, *The Myth of the 1978 Code*, __ BANKR. DEV. J. (forthcoming 2000).
[45] *See* Jones & Zywicki, *supra* note 1, at 239 (observing that critics of the credit card industry continue "to sound warnings about the 'credit card menace' without realizing that the consumers have already won the credit card Cold War").

shopping, credit cards have heightened retail competition and driven down prices for average consumers.

It is almost certainly the case that the rise in credit card use is the result of rational consumer choice, rather than improper behavior by credit card issuers. Consumers have enthusiastically embraced the convenience advantages and other benefits of using credit cards. Quite frankly, cash and checks are horse-and-buggy consumer technology in the age of the Internet. As Kenneth Scott observes, "The growth in both debit and credit has shifted consumer payments away from paper mechanisms and will continue in the future."[46]

Perhaps most fundamentally, critics and regulators of the credit card industry must keep in mind that most credit card users are convenience users. By focusing solely on the smaller group of credit card owners who revolve balances, bankruptcy theorists and government regulators truly are studying the tail, rather than the dog. Regulators must be certain that in trying to regulate revolving credit use, they do not interfere with convenience use of credit cards.

Preventing responsible individuals from getting access to credit cards as a result of ill-advised government regulations would be a tragedy of the highest proportions. There is simply no moral or economic justification for reserving to middle-class and wealthy people the opportunity to buy books at Amazon.com, while forcing low-income people to pay higher prices and suffer greater inconvenience at retail bookstores.

[46] *See* Scott, *supra* note 8, at 1341 fig. 1.

B. Credit Cards as Borrowing Medium

Credit cards are also used by consumers as a borrowing medium. As noted, bankruptcy commentators generally have ignored the transactional advantages of credit cards and the reality that most credit card use is for convenience. Instead, they have focused their attention on the use of credit cards as a borrowing mechanism.

Credit cards give users the opportunity to "revolve" debt from one month to the next, requiring them to pay interest rates and sometimes other fees in order to do so. Bankruptcy theorists have decried what they perceive to be exorbitantly high interest rates on these revolving debts. These "high rates" speak for themselves, it is claimed. No rational consumer would pay such "high rates" for credit, would they? These "high rates" are simply feeding bank profits at the expense of powerless consumers, so forcing banks to reduce these "high rates" is appropriate.

These attacks are again based on a misunderstanding of rational consumer behavior in a competitive credit market. As this Section will show, given the alternatives, it is rational for many consumers to revolve debt, using credit cards as a source of short-term, low-dollar amount borrowing. As with convenience users, the attractiveness of credit cards as a borrowing mechanism can be understood only by examining it in a *comparative* context. Examined in a comparative context, credit card terms and interest rates that appear outrageous to upper-middle-class scholars, lawyers, and judges with many credit options seem less onerous to those who actually use credit cards as a borrowing source.

Consider an individual confronted with the need to make a consumer purchase, but lacking sufficient savings to make the purchase out his current funds. Leave aside "big-ticket"

items such as homes and cars, for which there are well-developed secured lending markets to finance those purchases. Instead, consider an individual confronted with the need to pay for an unexpected car repair, a new appliance, or some new clothes to start a new job next week. In short, say an individual has to come up with $1,000 immediately. Assume further that he has insufficient savings and given his current income stream, he will not be able to repay the $1,000 for six months. What are his options?

If he is middle-class or wealthy, odds are he owns a home. Thus, his likely plan of action would be to draw on the equity he has accumulated in his house through a home equity loan or home equity line of credit. Not only would this be tax-deductible, but it is also collateralized by equity in one's home. Thus, it is available at very competitive rates of credit and with minimal transaction costs. In short, middle-class borrowers will often have access to a ready source of competitive credit in the form of the equity in their homes. Empirical evidence supports this view that higher-income households will have access to a wider variety of consumer credit (such as home equity loans) and thus will be less likely to carry balances on credit cards.[47]

But very few poor or young people own homes and those that do will not always have substantial amounts of equity available for consumer borrowing.[48] Thus, a home equity line of credit often will not be a viable option.[49] What are the other available options?

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[47] Cargill & Wendel, *supra* note 4, at 385 (noting that as income increases "alternative and less expensive forms of consumer credit become more accessible" and that "a high proportion (83 percent) of households with incomes above $80,000 have zero balances").
[48] *Id*.
[49] *See* EVANS & SCHMALENSEE, *supra* note 7, at 14 (noting that home equity loans "are not available to broad segments of the population").

He could try to sell off his current assets, such as furniture, clothing, appliances, etc. Consumer-to-consumer garage sales, however, are not likely to generate much in the way of funds, and selling personal assets in this manner hardly seems like an attractive way to raise funds in an emergency.

Rather than selling assets, he could take them to a pawn shop and pawn them. Needless to say, pawning personal items is only marginally more attractive than selling them outright and suffers many of the same drawbacks as a sale. Nonetheless, absent access to better forms of credit, borrowers will resort to pawn shops. Thus, during the late-1970s, Arkansas had very restrictive usury limitations in place that made it almost impossible to make a profit on consumer loans, including credit cards. Predictably, fewer consumer loans were made and more consumer loan applications were rejected, especially for higher-risk customers.[50] It appears that this market niche was filled by pawn shops, as pawn shops proliferated in Arkansas during this period and pawnbrokers were more prevalent in Arkansas than in all other credit markets combined.[51] Thus, Carlos Cuevas is undeniably right in observing: "If there were an interest rate ceiling on credit cards, then lending practices would change."[52] This is correct, but not for the reasons he believes – credit card issuers would have fewer customers and pawn shops and rent-to-owns would have more. It is unclear how increasing the market share of pawn shops at the expense of credit card companies would benefit lower-income consumers.

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[50] RICHARD L. PETERSON & GREGORY A. FALLS, IMPACT OF A TEN PERCENT USURY CEILING: EMPIRICAL EVIDENCE 15-20 (Credit Research Ctr., Working Paper No. 40, 1981) [hereinafter PETERSON & FALLS]

[51] *Id.* at 28-29 (noting that pawn shops were able to evade usury restrictions quite easily without raising interest rates by adjusting the discount rate they paid for the goods pawned).

[52] Carlos J. Cuevas, *The Consumer Credit Industry, The Consumer Bankruptcy System, Bankruptcy Code Section 707(b), and Justice: A Critical Analysis of the Consumer Bankruptcy System*, 103 COM. L.J. 359, 387-88 (1998).

The consumer could go to a bank and try to get a six month loan for $1,000. If so, his prospects for obtaining a loan on attractive terms are slim. Even if he is approved for the loan with no collateral, the loan terms are likely to be somewhat onerous. Brito and Hartley report that, "[a] senior bank officer told us that the costs to the bank of processing a loan are so high that they cannot afford to make a loan of less than $3,000 for one year except at interest rates *above* those charged on credit cards."[53] They also note, "inquiries in Houston in February 1992 revealed rates ranging from 17 percent and a $100 fixed fee for a collateralized 1-year loan at a branch of a major national finance company to over 50 percent for small loans ($300 maximum) at a local finance company."[54] In short, bank loans of similar size and duration "either do not exist or are available only at terms more onerous than those offered by credit card issuers."[55]

The high cost for small, short-term bank loans is attributable to the high transaction costs associated with processing a bank loan. Many of these costs are fixed costs, such as employee time, regulatory requirements, and paperwork, that remain constant regardless of the size of the loan. Thus, the relative costs of processing the loan will on average be greater for smaller loans than large.

Rather than dealing with the legal "loan sharks" at the bank, a borrower could descend into the underworld of illegal loan sharks. Given the terms for short-term, low-amount loans banks would offer, the loan terms offered by illegal loan sharks are probably not much more burdensome. Of course, the lender's collection remedies in the event of nonpayment may be

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[53] Brito & Hartley, *supra* note 3, at 402 (emphasis added).
[54] *Id*. at 402 n.6.

somewhat less attractive and somewhat more painful than dealing with a bank. The persistence of loan-sharking through time indicates that borrowers will resort to illegal and quasi-legal loan sharks if other avenues are foreclosed.

For some transactions, it may be possible to finance them directly through the retailer through a "rent-to-own," or secured financing scheme.[56] Of course, in many situations these options will not be available, such as the purchase of a wardrobe or a plane ticket. And, in fact, rent-to-owns have drawn criticism from many of the same people who have criticized the credit card industry.[57] Thus, while a secured financing scheme will sometimes present one option for financing an emergency expenditure, this will not always be the case. And while secured financing might be more attractive for financing the transaction than the alternatives previously discussed, it still has substantial drawbacks.

Looked at in this comparative light, a rational consumer seeking to finance short-term borrowing is likely to find a credit card quite an attractive option – even at the supposedly "high" rates of interest charged by credit cards. Once approved for a credit card, a consumer may borrow funds up to the credit limit at close to zero transaction costs. As Brito and Hartley

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[55] Jones & Zywicki, *supra* note 1, at 231.

[56] Rent-to own appears to be the true "lending" of last resort, as the idea was originally introduced by a retail appliance store owner for those customers who were denied credit for appliance purchases. *See* Susan Lorde Martin & Nancy White Huckins, *Consumer Advocates v. The Rent-to-Own Industry: Reaching a Reasonable Accommodation*, 34 AM. BUS. L.J. 385 (1997). This is still the case today, as rent-to-own arrangements continue to be used primarily by low-income consumers, who are unable to get other forms of credit at comparably better terms (if at all). *See* James P. Nehf, *Effective Regulation of Rent-to-Own Contracts*, 52 OHIO ST. L.J. 751, 752 (1991); Eligio Pimentel, *Renting-To-Own: Exploitation or Market Efficiency?*, 13 LAW & INEQ. J. 369, 394 (1995) ("Consumers who enter in [rent-to-own] transactions have usually been denied credit by other businesses. They typically resort to the [rent-to-own] arrangement in a final effort to obtain the merchandise they desire.").

[57] *See* Report of the National Bankruptcy Review Commission, Recommendation 1.3.5 ("Consumer rent-to-own transactions should be characterized in bankruptcy as installment sales contracts.").

conclude: "Even moderate transaction costs [for regular bank loans] can lead to substantial borrowing on credit cards."[58]

Empirical evidence strongly supports the thesis that the growth in credit card use by low-income credit-constrained cardholders has been primarily a rational substitution towards credit cards and away from less-attractive forms of consumer credit. Thus, credit cards have not so much increased the ability of credit-constrained consumers to increase their borrowing, as much as the cards have permitted those consumers to obtain access to previously unavailable credit, on more competitive and attractive terms. A report from the Chicago Fed comments that the growth in credit card debt among low-income borrowers is primarily a substitution for other forms of credit: "[t]he increase in the credit card debt burden for the lowest income group appears to be offset by a drop in the installment debt burden. This suggests that there has not been a substantial increase in high-interest debt for low-income households, but these households have merely substituted one type of high-interest debt for another."[59] Similarly, when usury restrictions were in place, lower-income borrowers had difficulty gaining access to consumer credit from banks. This difficulty forced lower-income borrowers to substitute other forms of credit (making much greater use of pawn shops, for instance) for bank loans, but it did not substantially affect their overall use of credit.[60] Credit cards have been an especially

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[58] Brito & Hartley, *supra* note 3, at 408.

[59] *See also* WENDY M. EDELBERG & JONAS D. M. FISHER, HOUSEHOLD DEBT 3 (Federal Reserve Bank of Chicago, Chicago Federal Letter No. 123, 1997) ("[I]ncreases in credit card debt service of lower-income households have been offset to a large extent by reductions in the servicing of installment debt."); Arthur B. Kennickell, et al., *Family Finances in the U.S.: Recent Evidence from the Survey of Consumer Finances*, 83 FED. RES. BULL. 17 (1997) (noting that the share of families using installment borrowing fell from 1989 to 1995 as a result of increased use of mortgages, credit cards, and automobile leasing); Canner & Fergus, *supra* note 4, at 4 (noting that early rise in credit card use may have been the result of "a substitution of credit card borrowing for other types of installment credit that do not provide flexible repayment terms").

[60] PETERSON & FALLS, *supra* note 50, at 27-33.

attractive alternative to the old unsecured personal line of credit and have almost driven these credit vehicles from the market completely.[61]

It is unfortunate that lower-income Americans do not have access to home equity loans and other forms of debt provided at low interest rates. Those seeking access to credit confront a variety of alternatives that all appear unattractive when compared to the options available to middle-class borrowers. But simply wishing or assuming that low-income earners had access to lower-cost credit does not make it available.[62] Confronted by an array of imperfect options, low-income borrowers act as rationally as everyone else. Given the attractiveness of credit cards as a source of short-term, low-transaction cost credit, the substitution documented by economists towards greater use of credit cards by credit-constrained low-income earners is consistent with economic theory. Moreover, it is difficult to see how the plight of low-income earners can be improved by denying them the option of using credit cards by making it more difficult to gain access to credit cards, their reliance on pawn shops and loan sharks increases.

C. Understanding Consumer Demand for Credit Card Borrowing

Examined in a comparative light, therefore, it is difficult to understand how credit cards could even be said to charge unduly "high" rates of interest. However, the analysis of whether

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[61] Kennickell, et al., *supra* note 59, at 17 (noting that the use of personal lines of credit other than home equity loans declined from 1989 to 1995 for almost every demographic group). "On the demand side, the decline may reflect a strong increase in the use of credit cards or a rise in mortgage refinancing. On the supply side, many lenders stopped offering unsecured lines." *Id*. Kennickel further observes that these personal credit lines are a "narrowly used" instruments. *Id*.

[62] *See* Robert B. Reich, *No Easy Answers to Easy Credit Fallout*, USA TODAY, June 9, 1999, at 15A, (informing consumers that the interest rate on credit cards is higher than on mortgages and automobile loans).

an interest rate is "high" is comparative, not absolute. Compared to realistic and comparable alternatives, credit card interest rates do not appear to be high.

Even trained economists seem to forget this basic economic lesson when discussing credit cards.[63] Professor Lawrence Ausubel, for instance, writes that "a credit card is really quite an expensive medium on which to borrow" and suggests that the fact that some consumers actually do borrow on credit cards presents a prima facie case of consumer irrationality.[64] Ausbel provides no explanation as to what the phrase "really quite an expensive medium" means, and there is certainly no evidence that he has reached his conclusion by comparing credit cards to other alternative forms of credit actually available to the borrowers in question.[65]

Nor is this reliance on credit cards likely the result of consumer ignorance about the interest rate they are paying. Studies show that "consumers are more sensitive to interest rates than they are to any other aspect of the credit contract."[66] When relevant, consumers are well-

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[63] Non-economists commit this blunder with regularity. *See*, *e.g.*, Vincent D. Rougeau, *Rediscovering Usury: An Argument for Legal Controls on Credit Card Interest Rates*, 67 U. COLO. L. REV. 1, 2 (1996) (referring to the "extraordinarily high interest rates people are willing to pay"); *id*. at 12 (referring to the "high cost" of credit card interest rates); *id*. at 15 (discussing "credit card industry's explanation for high credit card interest"); *id*. at 22 (claiming that consumers with access to credit cards will borrow on them "despite the high cost").

[64] Ausubel, *Failure of Competition*, *supra* note 4, at 70.

[65] Nor is this an isolated incident. Ausubel stipulates elsewhere that, "[d]espite interest rates exceeding 18 percent per year, typically three-quarters [by Ausubel's measure] of active credit card accounts at major banks are incurring these high finance charges (on balances averaging over $1,000) [also by Ausubel's measure] at any moment in time. The proclivity of consumers to borrow at these high rates suggests a substantial breakdown in optimizing behavior among credit cards." *Id*. at 71-72. Ausubel's reference to "three-quarters" of credit card accounts is based on his peculiar method of distinguishing revolvers from convenience users. *Id*. Ausubel provides no explanation for why 18% should be thought a "high" interest rates when compared to alternative sources of consumer credit, such as personal bank loans, rent-to-owns, and pawn shops. *Id*.

[66] Orville C. Walker, Jr. & Richard F. Sauter, *Consumer Preferences for Alternative Retail Credit Terms: A Concept Test of the Effects of Consumer Legislation*, 11 J. MKTG. RESEARCH 70, 76 (1974) [hereinafter *Consumer Preferences*]. *But see* LAWRENCE M. AUSUBEL, ADVERSE SELECTION IN THE CREDIT CARD MARKET 20-23 (Dep't of Economics, Univ. of Maryland, Working Paper, June 17, 1999) (arguing it now seems that the problem is that consumers are too responsive to interest rates rather than the other terms of their credit agreements).

aware of the interest rate they are being charged and have simply demanded alternative terms for their borrowing contracts.

Ausubel adduces additional arguments to support the proposition that borrowing at "high" credit card rates evidences non-optimizing consumer behavior. "One would expect that optimizing behavior would lead many consumers to . . . shop around for lower-priced credit cards . . . or rearrange their intertemporal stream of consumption (i.e., not borrow)."[67] He concludes that consumers fail to do so, leading to a failure of competition. But is his factual premise true?

1. Do Consumers Shop for Lower-Interest Rates?

Ausubel claims that confronted with such "high" credit card interest rates, rational consumers would be expected to "shop around for lower-priced credit cards." He provides no reason why shopping for low interest rates would be the most reliable evidence of consumer rationality. Ausubel's error stems from using interest rates as the sole evidence of competition in the credit card market, causing him to ignore the numerous other price and non-price margins on which credit card issuers compete. In fact, the issue is more complicated and consistent with rational economic behavior by both card issuers and consumers.

[67] Ausubel, *Failure of Competition*, *supra* note 4, at 72 n.44. Ausubel also argues that truly optimizing consumers would "shift into different modes of borrowing (e.g., home equity loans)." *Id*. To repeat a point made earlier – simply wishing that someone had a home and had access to home equity loans doesn't make it so. Comparative analysis only makes sense if compared to realistic alternatives. Ausubel makes no effort to establish that lower-income borrowers – those who are most likely to use credit cards as a source of revolving credit – actually have access to home equity loans.

a) Interest Rates Are Irrelevant for Convenience Users

Contrary to Ausubel's implicit assumption, credit card customers are not homogeneous and do not choose their cards strictly on the basis of interest rates. Ausubel's confusion resides in the failure to recognize that credit cards are used by both convenience users and revolvers. Credit card users are a heterogeneous lot, and the heterogeneity is driven primarily by whether they are convenience users or revolvers. In return, suppliers of credit cards offer different products to convenience users versus revolvers.

Most credit card users are convenience users who do not revolve a balance from month to month.[68] "Consumers who pay their balances in full, of course, accrue no interest charges."[69] As a result, while convenience users might be mildly interested in the interest rate, they are likely to be far more interested in other card benefits, such as co-branding, "cash back," and other benefits of card use.[70] Even leaving aside these ancillary benefits, convenience users have been shown to be relatively unconcerned about credit card interest rates, but are

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[68] *See supra* notes 4-7.

[69] Cargill & Wendel, *supra* note 4, at 379; *see* Jones & Zywicki, *supra* note 1, at 232 n.216; Canner & Luckett, *supra* note 26, at 663 ("Interest rates are largely irrelevant, of course, for convenience users.").

[70] *See* Canner & Luckett, *supra* note 26, at 655-56 ("Consumers who use a credit card principally as a payment device most likely would, in selecting a card, focus on the level of any annual fee, the length of the grace period, the availability of desirable enhancements, and the level of authorized charges (the credit limit). The stated interest rate is unlikely to be of much importance to consumers who view their cards mainly as a transactions device."); William F. Baxter, *Section 85 of the National Bank Act and Consumer Welfare*, 1995 UTAH L. REV. 1009, 1017 (1995) ("APR stability in an increasingly competitive credit card market is consistent with issuers' current offerings of a wide range of innovative products that were unavailable ten years ago."); ALEXANDER RASKOVICH & LUKE FROEB, HAS COMPETITION FAILED IN THE CREDIT CARD MARKET*?* 12 (U.S. Dep't of Justice, Economic Analysis Group Discussion Paper EAG 92-7, 1992) [hereinafter RASKOVICH & FROEB]. Ausubel's inability to comprehend the nature of credit card competition is evidenced by his mocking reference to the success of an "Elvis card," introduced some years ago. Ausubel, *Failure of Competition*, *supra* note 4, at 72. Although I am not familiar with all the details of the "Elvis card," I do carry a Frank Sinatra credit card, which I suspect must be similar. My Frank Sinatra accrues points toward the purchase of special, limited-edition compact discs that are unavailable anywhere else. In short, the "Sinatra card" provides unique and attractive ancillary benefits. Assuming that the "Elvis card" provided similarly unique benefits Ausubel's uncomprehending and elitist dismissal of Elvis card customers as irrational seems somewhat misplaced.

quite sensitive to other price terms of the credit card agreement, such as the annual fee and the length of the interest-free grace period.[71] "Credit card pricing, however, involves [elements other than interest rates], including annual fees, fees for cash advances, rebates, minimum finance charges, over-the-limit fees, and late payment charges. In addition, the length of the 'interest-free' grace period, if any, can have an important influence on the amount of interest consumers pay when they borrow on their credit cards."[72] Given that convenience users are most interested in these ancillary benefits, or terms other than interest rates, it is not surprising that this is the margin on which card issuers appear to be competing most heavily.[73] As I have written elsewhere, "using interest rates as the only proxy for vigorous competition is tantamount to saying that the automotive industry is noncompetitive because car manufacturers increase quality through improved safety, comfort, or gas mileage, rather than simply cutting prices. Such a conclusion would obviously be incorrect when applied to cars, and it is equally incorrect when applied to credit cards."[74]

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[71] Canner & Luckett, *supra* note 26, at 663; Pozdena, *supra* note 4, at 2; Canner & Fergus, *supra* note 4, at 8 (noting that reduction in the grace period hurts convenience users); Ausubel, *Failure of Competition*, *supra* note 4, at 72 (noting that credit card marketers report that consumers are much more sensitive to increases in the annual fee than to increases in the interest rate).

[72] FEDERAL RESERVE BOARD, THE PROFITABILITY OF CREDIT CARD OPERATIONS OF DEPOSITORY INSTITUTIONS 4 (Aug. 1998) [hereinafter PROFITABILITY 1998].

[73] Canner & Luckett, *supra* note 26, at 663; Pozdena, *supra* note 4, at 2.

[74] Jones & Zywicki, *supra* note 1, at 232-33. *See also* DeMuth, *supra* note 36, at 230 ("It is, however, consistent with the operation of competitive markets for firms, faced with declining costs and growing demand, to expand output and improve product quality at a constant market price. Th[i]s is just what happens when a credit card issuer offers more features and larger credit lines."); EVANS & SCHMALENSEE, *supra* note 7, at xi ("From the viewpoint of issuers and cardholders alike, the interest rate is just one of many dimensions of a payment card."); *id*. at 97 ("While economists are exploring the reasons why businesses adjust different aspects of their product offerings and prices, there is little evidence that the failure to adjust dollar prices signals a breakdown of competition."). I personally have no idea what my credit card interest rate is, nor do I care. Similarly, I suspect that most of the readers of this article neither know nor care about their credit card interest rate. The reason is obvious. I, like most of the readers of this article, are upper middle-class consumers who are convenience users of credit cards. Thus, I care much more about my frequent flyer miles and rental car insurance than about the interest rate.

The widespread use of interest rates as the sole proxy for competitiveness in the credit card market leads to related errors on other aspects of credit cards and bankruptcy. Thus, Ausubel notes that interest rates have also not increased despite mounting losses to credit card issuers caused by the spiraling consumer bankruptcy filing rate.[75] This analysis misses the point. If the costs of other elements of card pricing have been falling (such as the cost of funds or administrative costs) then the proper question is whether these bankruptcy losses have *slowed the drop* in interest rates that would otherwise have occurred without those losses. The bankruptcy losses may have simply offset other cost reductions that would have otherwise led to rate reductions. Looking only for nominal interest rate increases simply asks the wrong question.

Even assuming that interest rates have not been adjusted in response to bankruptcy losses, this observation largely misses the point. Credit card issuers have responded to increased bankruptcy losses in *other* ways. They have increased fees and penalties for late payments and violations of the customer's credit limit, so called "hidden fees."[76] Given that late payments and overlimit charges are leading predictors of eventual default, these "hidden fees" are targeted almost exclusively at high-risk card users who are most likely to default. Thus, it seems obvious that the increase in these fees by card issuers is a direct response to the

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[75] He has repeated this error elsewhere. For instance, in testimony on a bankruptcy reform bill, Ausubel observed that even as bankruptcy losses to credit card issuers have risen, interest rates on credit cards have remained constant. Thus, he concludes, "There is no empirical basis for arguing that a reduction in bankruptcy losses will get passed through to consumers. The most likely effect is merely a windfall gain in profits for lenders, and little or no benefit to consumers." *Bankruptcy Revision: Hearings on H.R. 3150 Before the Subcomm. on Commercial and Admin. Law of the House Comm. on the Judiciary,* 106th Cong. (1998) [hereinafter Ausubel, *Hearings*] (testimony of Prof. Lawrence M. Ausubel).

[76] Lawrence M. Ausubel, *Credit Card Defaults, Credit Card Profits, and Bankruptcy*, 71 AM. BANKR. L.J. 249, 263 (1997) [hereinafter, Ausubel, *Credit Card Defaults*]. Ausubel does not identify any lack of

increased default rate of recent years. By contrast, an increase in interest rates should negatively affect all revolvers, regardless of whether they are actually higher-risk. No explanation is provided for why credit card issuers would be expected to choose the less-efficient means of responding to increased defaults by increasing interest rates for all users, good and bad risks alike, rather than using more-efficient, targeted means, such as increasing late-payment and over-limit fees. Nor is there an explanation for how consumers suffer when credit card issuers respond to increased default rates by choosing a more efficient rather than a less-efficient response to the problem. Anecdotes indicate that credit card issuers routinely waive these penalty charges when they are assessed against innocent low-risk cardholders who may have accidentally missed a payment, but otherwise represent no default risk.[77] Thus, the penalty fees seem to be aimed at and enforced against only those who represent the largest default risks, unlike interest rate hikes that affect all users.

In response to increased bankruptcies and bankruptcy losses, issuers also have tightened their credit issuing standards and reduced credit limits.[78] Thus, increased defaults have led to increased credit rationing, imposing costs on those who otherwise would have been able to get a credit card, but now are unable to do so. Bankruptcy losses also partially explain the

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disclosure associated with either the existence or imposition of these fees, so it is not clear from the article why these fees should be characterized as being "hidden" as opposed to "late" fees. *Id*.

[77] *See* James J. Daly, *Back from the Brink*, CREDIT CARD MGMT., May 1, 1998, at 54 [hereinafter Daly, *Back From the Brink*] ("Despite rapid increases in penalty fees, with late fees jumping from an average of about $18 to $20, the lower number of revolvers and banks' unwillingness to anger their cardholders conspired to keep actual [profit] category growth to a mere 2%."); Carol Frey, *Banks Put Squeeze on Prompt Card-Holders*, RALEIGH NEWS & OBSERVER, June 12, 1999, at D1, *available in* 1999 WL 2755062 ("[C]ustomers in good standing often can have late fees removed from their bills just by asking."); Lynn Arditi, *Credit-Card Late Fees Total $4 Billion a Year*, BUFF. NEWS, May 11, 1999, at D2 (noting willingness of card issuers to waive late fees for good customers). There have also been reports of massive card cancellations at First USA in response to their plan to eliminate their one-day grace period on payments.

steady erosion in the length of the non-interest grace period that has taken place in recent years.[79] Grace periods are a coveted benefit to cardholders but are expensive to issuers. Thus, in part, cardholders have passed bankruptcy losses onto consumers through a reduction in the value of a benefit previously offered and highly-coveted by convenience users especially. All of these factors can be seen as part of the price paid by consumers for increased credit card defaults, but none of them are directly reflected in the interest rate alone.

Issuers have also developed measures for indirectly charging convenience users for their services. Credit card issuers have offset the rising tide of convenience users by increasing the fees that they charge to retailers who accept their cards.[80] Of course, some of these charges are eventually cycled back into the retail price of the goods, thus providing a mechanism for at least partially capturing increased convenience use.

b) Larger Revolvers Shop for Lower Interest Rates

Although the majority of users are convenience users, who don't care about interest rates, there remains a smaller group of revolvers who may be somewhat more interested in interest rates. A large number of revolvers carry relatively low balances, so it is doubtful that even they will choose their cards purely on the basis of interest rates, especially if it requires them to forgo other card benefits. Canner and Luckett observe that although

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[78] *See* Mark M. Zandi & Celia Chen, *Debt Service Relief*, REGIONAL FIN. REV., Feb. 1998, at 11 (noting tightening of lending standards by credit card issuers).

[79] *See* Frey, *supra* note 77, at D1 (noting that some banks "have shaved three or four days off the time they give card-holders to pay up, and now when payments are late, many banks show no mercy"); John Stewart, *Victims of Your Own Success*, CREDIT CARD MGMT., Sept. 1, 1998, at 160 (noting that "grace periods seem to be quietly shortening"); *see also* Canner & Fergus, *supra* note 4, at 8 (noting that one way of repricing credit card services is to reduce the length of the grace period).

> the amount of credit card debt owed by cardholders who revolve varies substantially, a large fraction owe relatively small amounts. The 1989 Survey of Consumer Finances, for example, revealed that, among cardholders with debt, 32 percent owed less than $500 at the time of the survey, and an additional 18 percent owed between $500 and $1,000. Thus, a significant number of those who use credit cards as a borrowing device may have balances small enough to render the interest rate a secondary consideration in deciding which cards to hold.[81]

The trivial savings for the average revolver is evidenced by Canner and Luckett's observation that for a family owing the median level of credit card debt in 1989 (approximately $1,250), "a 3 percentage point drop in the [interest] rate would reduce the annual interest charge by less than $40."[82] As they conclude, "[i]t is questionable whether a $40 annual saving would be enough to induce a cardholder to switch from a card that has been providing satisfactory service or attractive enhancements."[83] Cargill and Wendell similarly observe that for "each $100 of balance carried through the year, the consumer saves $1 per year for each 100 basis point reduction in the effective annual interest rate. Thus, a household with a balance of $1,000 through the year can save only $10 per year for each 100 basis point reduction in the interest rate."[84] Brito and Hartley estimate that it would take a difference in interest rates of over 3% for an individual who carries a balance of about $1,000 to switch cards, and if they carry the balance for less than the whole year, it would take an even larger interest rate

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[80] *See* Flynn, *supra* note 40, at D1 (noting that banks have steadily raised the rates they charge stores that accept credit cards, sometimes up to 3.5% for some sales).
[81] Canner & Luckett, *supra* note 26, at 663.
[82] *Id*. at 664.
[83] *Id*.
[84] Cargill & Wendel, *supra* note 4, at 380-81.

difference to induce switching.[85] Given that most consumers carry no balance and that most revolvers carry relatively small balances, the vast majority of consumers will gain little benefit from searching around for the lowest interest rate available. As Cargill and Wendel observe, "[t]hese findings suggest that lack of consumer shopping for interest rates may be an entirely rational household decision."[86] They further note that unless the search for a lower interest rate "can be conducted quickly, easily, and with little resource cost, consumers may find it more cost effective to use search time to catch a good sale at a supermarket or discount store."[87] Given these modest benefits to switching cards purely on the basis of interest rates, even a relatively small cost to the consumer will likely prevent the consumer from switching cards. It's just not worth it. Given the uncertainty, hassle, and information costs of switching cards, and the fact that the consumer will likely have to sacrifice attractive ancillary benefits, it is untenable to conclude that failure to switch cards in the face of relatively trivial benefits of a small reduction in interest rates is evidence of consumer irrationality. Given the positive costs and relatively trivial benefits for most people in shopping for a lower interest rate, it is surprising that a large number of people do in fact search among cards for better interest rates and that they appear to act on the basis of this information.[88]

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[85] Brito & Hartley, *supra* note 3, at 409. Notably, if a consumer expected to finance a $1,000 balance for only a month and the current interest rate was an astronomically high 23.87%, transaction costs of $1.52 would still be sufficient to prevent a switch to a card with an interest rate of 19.56%. *Id*.

[86] Cargill & Wendel, *supra* note 4, at 381.

[87] *Id*.

[88] RASKOVICH & FROEB, *supra* note 70, at 9 ("[W]e [reject] . . . Ausubel's hypothesis that consumers are insensitive to the credit card interest rate . . . if the demand for credit card loans were perfectly inelastic, then the entire shock to supply would be passed on to consumers through a commensurate change in the equilibrium credit card interest rate, net of default losses. For cost shocks to be passed on only partially to price, it must be the case that the demand for credit card loans slopes downward.").

As predicted by economic theory, it is primarily larger revolvers who will choose their card on the basis of interest rates rather than other factors.[89] Surveys indicate that revolvers are more likely than convenience users to read credit card solicitation materials, and a larger proportion of revolvers said that they would apply for a card with a lower rate if it were offered.[90] Moreover, the larger the outstanding balance a revolver carried, the more likely the cardholder would be to apply for a lower-rate card.[91] Thus, those consumers who would expect to place a high premium on relative interest rates do, in fact, do so. They choose their cards on the basis of such considerations. By contrast, interest rates matter little to most card users and as a result, they choose their cards according to other criteria.

Card issuers have responded in kind, tailoring their products to the much-larger pool of convenience users and low-revolvers who do not choose their cards primarily on the basis of interest rates.[92] Those who choose their cards primarily on the basis of interest rates are a small percentage of the overall credit card pool, thus it makes little sense to design one's standard product to capture that group. While it may worthwhile to try to design a special product for that group, such economic discrimination will be difficult to design and enforce. Canner and Luckett note that

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[89] *See* Pozdena, *supra* note 4, at 2 (noting that riskier households "will self-select into using the credit feature of their cards because, for them, the rate premium is attractive given the costs to them of alternative credit").
[90] Canner & Luckett, *supra* note 26, at 663 (discussing 1986 study by Payments Services, Inc.).
[91] *Id*.
[92] *Id*. at 665 ("On the demand side, credit card users have tended to be relatively insensitive to interest rate levels in their decision to acquire or to keep a particular card. Consequently, card issuers have tended to compete on factors other than price.").

> Expecting to gain relatively little incremental volume from either new or existing cardholders by lowering rates, issuers have had minimal economic incentive to reduce rates to the broad spectrum of their cardholders (as opposed to selected subsets of customers). Lowering the interest rate on standard card plans would reduce interest revenue on balances of all existing cardholders who revolve their accounts – customers who apparently were willing to pay the original rate.[93]

This feature distinguishes credit card loans from other types of consumer loans. For other types of loans, such as auto loans, a lower interest rate is available only to new borrowers, thus there is no loss of revenue on existing loans.[94]

Anecdotal evidence supports the intuition that larger revolvers will tend to invest more in learning about competing interest rates and switching cards in response the information gathered. In recent years, card issuers have made widespread use of introductory "teaser" rates to induce card users to switch banks. "Teaser" rates offer rates much lower than the prevailing market rate for an introductory period of 6 to 18 months, encouraging consumers to transfer balances to the new card with the lower interest rate. While convenience users are unlikely to respond to these offers, large revolvers follow them with more interest. In fact, large revolvers have learned to "card surf" by jumping from one card to another, taking advantage of the introductory rate but then switching to yet another card when the low-interest introductory period ends. According to one report, credit card customers "are learning to jump from one promotional low-interest-rate lender to the next, just like shopping for the lowest-priced tank of gas."[95] One "card surfer" reports that he whittled down massive credit card debt by jumping through the low "teaser" rates of five different cards. "I'm beating them at their own game," he

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[93] *Id*. at 664.
[94] *Id*.
[95] Jeff Bailey & Scott Kilman, *More Borrowers Appear to be Wising Up About Credit*, STAR TRIB. (Minneapolis-St. Paul), Mar. 1, 1998, at D5.

triumphs.[96] Credit card issuers express parallel frustration with their inability to keep these card surfers "captured," which requires them to "steal[ ] the same people over and over."[97] Savvy credit card customers, observes one industry analyst, "pay off Peter with Paul – at a lower rate. And by the time Paul wants a bigger payment, Jane comes around with a better offer."[98] Given the low rates offered by these cards, it is difficult for banks to actually make profits from these borrowers during the introductory period.[99]

Given the damnations of the bankruptcy community against credit card issuers for the alleged abuse of maintaining "high" interest rates on credit cards, it is amusing to note that they also condemn these low introductory interest rates.[100] Apparently this criticism stems from the idea that somehow credit card issuers "hook" new customers with these introductory rates into taking on new debt obligations and then raise the rates later.[101] It is not clear how credit card issuers are supposed to appease their critics. While most critics complain that interest rates are "too high," others (and sometimes the same critics) simultaneously criticize them for offering introductory rates that are "too low." One is reminded of the plight of the fictional Tom Smith

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[96] *Id*.
[97] *Id*.
[98] *Id*. *See also* Jonathan D. Epstein, *Credit Card Industry Turbulent*, GANNETT NEWS SERVICE, May 24, 1999, *available at* 1999 WL 6968757 ("But the offers are going to an increasingly sophisticated potential customer. Many consumers have mastered the art of flipping their balances from one teaser offer to another, denying the issuers steady customers and hefty profits."); *id*. ("'It's becoming increasingly difficult to obtain customers and to grow the business. It's enabled cardholders to learn how to use things to their advantage . . . . Just using a teaser rate is not enough. Otherwise, your customer will just leave at the end of the teaser rate.'" (quoting industry analyst Moshe A. Orenbuch)).
[99] James J. Daly, *Saving on Postage*, CREDIT CARD MGMT., May 1, 1997, at 68 [hereinafter Daly, *Saving*] ("There is no way you can make profits in the bank card industry at a 5.9% interest rate . . . . You will be attracting more rate surfers than potential (long-term) customers." (quoting industry analyst Robert Bzezensky)).
[100] *See, e.g.*, ROBERT L. JORDAN, ET AL., BANKRUPTCY 208 (5th ed. 1999).
[101] Ausubel, *Credit Card Defaults*, *supra* note 79, at 262-63; *Bankruptcy Revision: Hearings on Bankruptcy Reform and Financial Services Issues Before the Senate Comm. On Banking*, 106th Cong. 1 (1999) [hereinafter Klein, *Hearings*] (testimony of Gary Klein, attorney for Nat'l Consumer Law Ctr.).

and his incredible bread machine, "Price too high? Or price too low?/Now, which charge did they make?/Well, they weren't loath to charging both/With Public Good at stake!"[102]

A recent survey found that roughly 60% of Visa and MasterCard issuers offer low introductory rates,[103] and these introductory rates are highly touted in solicitation mailings.[104] As predicted by economic theory, the clear target of these solicitations are large revolvers – the group most likely to be responsive to changes in interest rates. In short, issuers have managed to make these lower rates available to the parties most interested in them, while retaining higher rates for those who do not care about their interest rates. Both patterns are consistent with rational consumer behavior.[105] Similarly, credit card issuers are increasingly distinguishing their customers based on risk characteristics, offering lower interest rates to a select group of lower-risk customers with good payment records, while retaining higher interest rates for higher-risk, late-paying customers.[106]

Thus, it is doubtful that the failure of consumers to change credit cards on the basis of changes in interest rates really provides sound evidence of consumer irrationality. Instead, consumers exhibit highly rational behavior in this area. Most cardholders gain little or no benefit from a reduction in interest rates because they revolved little or no balance. For these cardholders almost any cost of switching or loss of existing benefits from switching will exceed

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[102] R. W. Grant, *Tom Smith and His Incredible Bread Machine*, *reprinted in* THE INCREDIBLE BREAD MACHINE 171, 174 (1974).
[103] Bailey & Kilman, *supra* note 95, at D5.
[104] *See* JORDAN, ET AL., *supra* note 100, at 208 (reporting that in 1997 two-thirds of credit card solicitations offered consumers introductory rates as low as 4.9%).
[105] Canner & Luckett, *supra* note 26, at 664.
[106] *Id*. at 666; PROFITABILITY 1998, *supra* note 72, at 4 ("Over the past several years, pricing practices in the credit card market have changed significantly. Many card issuers that in the past offered programs with a single interest rate now offer a broad range of card plans with differing rates depending on credit risk and consumer usage patterns.").

the gains from switching. By contrast, larger revolvers who would benefit from a reduction in interest rates do in fact seek out cards that offer that benefit and choose accordingly. For them, the benefits of switching for a better interest rates are larger. In short, once Ausubel's mistaken use of interest rates as the sole measure of consumer rationality is corrected in favor of a more realistic analysis, consumers readily reveal themselves as highly rational.

2. Rearranging Intertemporal Consumption Streams

As to the claim that consumers should "rearrange their intertemporal stream of consumption" as a response to "high" interest rates, Ausubel again commits the fallacy of applying an absolute standard to a relative comparison. Here the relevant inquiry is the comparative rate at which the individual prefers to consume today rather than at a later date. This comparison will include such things as the likelihood of increased income in the future (the life-cycle hypothesis) and the durability or capital nature of the goods purchased, such that they can be seen as an investment that will save money over the long run.[107] As Christopher DeMuth observes:

> Decisions to finance current consumption out of future earnings are not fundamentally different from other economic decisions; most decisions are not simple trade-offs between goods at one point in time, but are trade-offs between present and future consumption and/or present and future production. Personal borrowing, investment, and spending decisions follow patterns that are consistent and rational.[108]

[107] *See generally* 2 FRANCO MODIGLIANI, THE COLLECTED PAPERS OF FRANCO MODIGLIANI (1980) (discussing life cycle hypothesis of saving).
[108] DeMuth, *supra* note 36, at 205.

Ausubel provides no evidence as to the endogeneity of individual preferences for inter-temporal consumption or as to why credit card interest rates are "high" in light of this trade-off between current and future consumption.

3. Conclusion

In short, characterizing credit card interest rates as "high" or "expensive" appears to be little more than *ipse dixit* – credit card interest rates are just "high" in the opinion of some observers according to some absolute standard, that they alone seem to know.[109]

III. Has Competition Failed in the Credit Card Industry?

Ausubel also argues that a failure of competition in the credit card industry means that credit card rates are "high" relative to what they "should" be in a competitive market. Ausubel posits (without any support) that the "cost of funds is obviously the primary determinant of the marginal cost of lending via credit cards, and it is usually the only component of marginal cost that varies widely from quarter to quarter."[110] Ausubel also observes (with support) that from 1982 to 1989, the cost of funds rate fluctuated roughly between 6-15% and generally declined

[109] Though I may be belaboring a somewhat obvious point, numerous members of the bankruptcy community have made the same error of describing credit card interest rates in above terms. For instance, Bankruptcy Judge David F. Snow has recently stated, "Although the competition among card issuers has resulted in some decrease in interest rates, these rates remain high, averaging more than eighteen percent per annum." David F. Snow, *The Dischargeability of Credit Card Debt: New Developments and the Need for a New Direction*, 72 AM. BANKR. L.J. 63, 65 (1998). This error seems to be a modern updating of the medieval church's belief in an absolute "just price" for goods and interest rates that could be determined independent of market forces. *See* David Friedman, *Just Price*, in THE PALGRAVE ENCYCLOPEDIA OF LAW AND ECONOMICS.

[110] Ausubel, *Failure of Competition*, *supra* note 4, at 53.

from 15% at the beginning of the period to below 10% at the end of the period. During this same period, by contrast, credit card interest rates remained relatively constant at approximately 18%. From this comparison Ausubel draws two conclusions: first, that credit card interest rates are "sticky" and relatively unresponsive to changes in federal funds rates; and second, that credit card interest rates are sticky at "high" rates of interest, suggesting a lack of issuer competition and the presence of consumer irrationality in the credit card market.[111] Although the proposition of "sticky" credit card interest rates is largely incorrect, it does contain a grain of truth. By contrast, the proposition that interest rates are sticky at "high" rates of interest is completely incorrect.

Ausubel and others also argue that as a result of this absence of adequate competition, credit card operations have earned persistent supranormal returns over a long period of time and that these profits have led credit card issuers to extend credit recklessly in the pursuit of ever-larger profits. This claim of failure of competition in the credit card market is a necessary condition that critics of the credit card industry *must* be able to support if their criticisms are to stand. Persistent profits are possible only if the credit card industry is proven to be largely noncompetitive. In turn, the presence of persistent profits is a necessary condition for making the claim that credit card issuers have extended credit "recklessly" and the related claims that credit card issuers only have themselves to blame for increasing bankruptcy losses. Moreover,

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[111] Ausubel seems to have retreated slightly from his position that credit card interest rates are sticky. *See* LAWRENCE M. AUSUBEL, THE CREDIT CARD MARKET, REVISITED 20 (Dep't of Economics, Univ. of Maryland, WORKING Paper, July 20, 1995). Nonetheless members of the bankruptcy community's continued reliance on Ausubel's *Failure of Competition* necessitates an in depth analysis here. Thus, even if Ausubel no longer stands by his earlier thesis, for the sake of exposition I will follow the convention of the bankruptcy community of attributing the thesis to Professor Ausubel as the argument was made first in his 1991 article. I apologize for any confusion that may result.

if the credit card market is largely competitive, then bankruptcy losses will tend to have the negative efficiency effect of passing on these losses to consumers, rather than being primarily a wealth transfer from credit card issuers to consumers in the form of reductions in these profits.

This suggests that there are two possible scenarios to describe the operations of the credit card market. One model posits that the credit card market is competitive and that consumers are rational. The alternative model is that market is fundamentally noncompetitive and that consumers are fundamentally irrational in their credit card use. As the following discussion will demonstrate, the argument that competition has failed in the credit card market is facially implausible and empirically doubtful.

A. Are Credit Card Interest Rates "Sticky"?

There is some truth in the observation that credit card interest rates are sticky. Unfortunately for the foes of credit cards, this observation tends to *undercut* rather than support their claims of consumer irrationality and supranormal industry returns.

As noted, the cornerstone of the argument that credit card interest rates are sticky is the observation that during the period 1982-1989 interest rates on credit cards remained relatively constant, even as the cost of funds rate fell significantly.[112] From this observed stickiness, it is concluded that rapacious credit card issuers are reaping huge profits by shearing gullible consumers. While the factual observation is somewhat correct, the conclusion is absolutely incorrect.

[112] Ausubel, *Failure of Competition*, *supra* note 4, at 53.

The error in the conclusion is evidenced by a more thorough examination of *all* of the relevant data, rather than the small and arbitrary sample period. Table 1 presents data on changes in credit card interest rates from 1972 to 1989 and compares them to interest rates on two other forms of consumer credit, automobile loans and personal loans.[113] As the data shows, throughout this entire period credit card interest rates have been far more "sticky" than these other forms of consumer credit.

[113] SIDNEY HOMER & RICHARD SYLLA, A HISTORY OF INTEREST RATES 427 tbl.58 (3d ed. 1991).

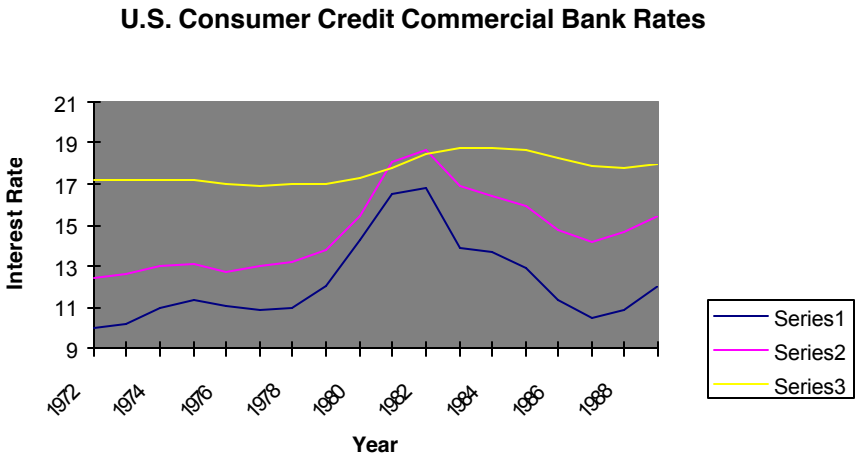
Table 1: U.S. Consumer Credit Commercial Bank Rates, 1972-1989

Source: SIDNEY HOMER & RICHARD SYLLA, A HISTORY OF INTEREST RATES 427, tbl. 58 (3d ed. 1991).

	% Yield		
Year	New Automobiles (36-48 months)	Personal Loans (24 months)	Credit Card Plans
1972	10.05	12.46	17.21
1973	10.21	12.60	17.21
1974	10.97	12.99	17.21
1975	11.36	13.08	17.16
1976	11.07	12.77	17.05
1977	10.92	12.97	16.89
1978	11.02	13.19	17.03
1979	12.02	13.85	17.03
8-year average	10.95	12.99	17.10
1980	14.30	15.47	17.31
1981	16.54	18.09	17.78
1982	16.83	18.65	18.51
1983	13.92	16.88	18.78
1984	13.71	16.47	18.77
1985	12.91	15.94	18.69
1986	11.33	14.82	18.26
1987	10.46	14.23	17.93
1988	10.85	14.68	17.78
1989	12.07	15.44	18.02
10-year average	13.29	16.07	18.18

The conclusion is strongly reinforced by a graphical representation of the same data.

Chart 1: U.S. Consumer Commercial Bank Rates, 1972-1989[114]



Series 1: New Automobile Loans (36-48 months)
Series 2: Personal Loans (24 months)
Series 3: Credit Card Plans

Examining Table 1, it is evident that Ausubel is correct about the stickiness of interest rates in the period from 1982-1989. Perhaps more striking is that interest rates on credit cards were *equally sticky* throughout the *entire period* of 1972-1989. The era of the 1970s, of course, was an era of dramatically *increasing* interest rates – essentially the mirror opposite of the falling interest rates of the 1980s, as shown in Table 2.[115]

[114] Data derived from Table 1.
[115] HOMER & SYLLA, at 388-89 tbl.52.

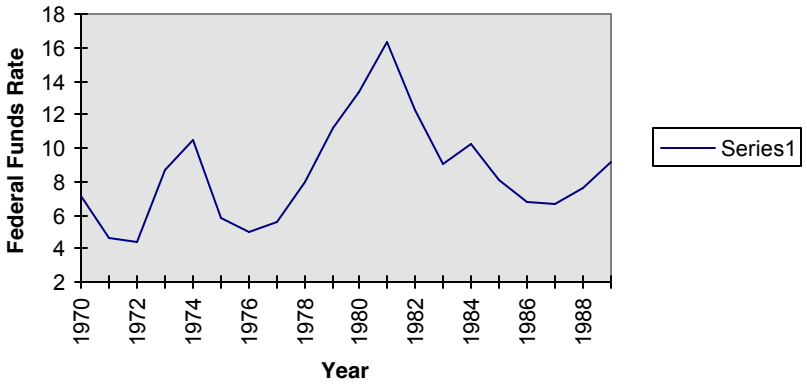
Table 2: Federal Funds Rate, 1970-1989

Source: SIDNEY HOMER AND RICHARD SYLLA, A HISTORY OF INTEREST RATES 388-89 tbl. 52 (3d ed. 1991).

Year	Federal Funds Annual Average	Federal Funds Low	Monthly Average High
1970	7.18	4.90	8.98
1971	4.66	3.71	5.57
1972	4.43	3.29	5.33
1973	8.73	5.94	10.78
1974	10.50	8.53	12.92
1975	5.82	5.20	7.13
1976	5.04	4.65	5.29
1977	5.54	4.61	6.56
1978	7.93	6.70	10.03
1979	11.19	10.01	13.78
1980	13.36	9.03	18.90
1981	16.38	12.37	19.10
1982	12.26	8.95	14.94
1983	9.09	8.51	9.56
1984	10.23	8.38	11.64
1985	8.10	7.53	8.58
1986	6.80	5.85	8.14
1987	6.66	6.10	7.29
1988	7.57	6.58	8.76
1989	9.21	8.45	9.85

The fluctuation in average interest rates over this period is also represented in Chart 2.

Chart 2: Federal Funds Interest Rate, 1970-1989[116]



As Table 2 identifies, during the period 1972-1982, the federal funds rate rose form a low of 3.29% to a high of 19.10%. Annual averages ranged from 4.43% in 1972, steadily increasing to 16.38% in 1982, before they started falling again. By beginning his examination in 1982 Ausubel has essentially chosen the height of the massive interest rates increases of the 1970s and 1980s as his benchmark, and focused on only the downward trend in the cost of funds from 1982-1989. It is not defensible to simply choose a short and arbitrary time period and ignore the periods that came before and after.[117]

What is significant upon examining Table 1 and Table 2 together, therefore, is that the stickiness of credit card interest rates is not a phenomena of the post-1982 period. Instead, it is evident that credit card interest rates were *also* sticky during the 1970s and early-1980s despite a *rising* cost of funds rate. Regardless of whether the cost of funds rate is rising or falling, for a

[116] Data derived from Table 2.
[117] *See* Canner & Fergus, *supra* note 4, at 2 ("Thus, the more reliable indicator of long-run bank card profitability seems to be an average derived from periods of low as well as high profitability rather than from the atypical experience of recent years.").

period of 20 years the interest rate on credit cards has remained relatively constant, until the decline in interest rates in recent years.[118] Thus, if credit card issuers were reaping large profits off the "spread" between the cost of funds and interest rates in the 1980s, they were suffering equally large losses during the 1970s and the early 1980s.[119] In fact, during this period, the average return on credit card operations was lower than for other sectors of banking activity.[120] As Homer and Sylla conclude regarding this period, "[c]redit card plan rates . . . on average moved barely at all in relation to other rates during a period that witnessed the greatest fluctuations in money and bond market rates in U.S. history."[121] Although it may be possible to argue that state usury ceilings limited maximum credit card interest rates as the cost of funds rose, usury restrictions cannot explain why credit card interest rates were not lower at the beginning of the period when the cost of funds was much lower, nor why credit interest rates did not rise in the post-*Marquette* period 1978-1982.

This historical stability in credit card interest rates has actually cracked in recent years, as credit card interest rates have steadily declined in recent years. As Table 3 indicates, shortly after the closing period of Ausubel's initial study, credit card interest rates began a steady downward trend that has resulted in significantly lower interest rates on credit cards.[122]

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[118] PROFITABILITY 1998, *supra* note 72, at 4-5 ("Data . . . indicate[s] that credit card interest rates fell sharply from mid-1991 through early 1994 after being relatively stable for most of the previous twenty years. Since early 1994, credit card interest rates have fluctuated in a narrow range between 15.13 and 16.25 percent.").
[119] MANDELL, *supra* note 4, at xix ("From 1979 to 1981, as the cost of money skyrocketed during the inflationary Carter years, the banks actually lost money on their credit cards.").
[120] *See* Canner & Fergus, *supra* note 4.
[121] HOMER & SYLLA, *supra* note 113, at 427.
[122] PROFITABILITY 1998, *supra* note 70, at 5 tbl.2. *See also* Canner & Luckett, *supra* note 26, at 665 ("In the past several months, however, much of the rigidity in credit card pricing has been breaking down, with a growing number of issuers reducing rates 2 to 4 percentage points.").

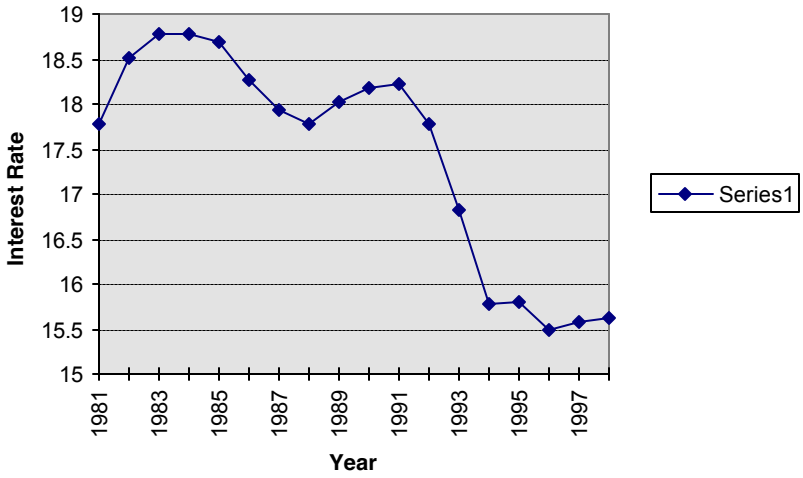
Table 3: Credit Card Interest Rates, 1972-1998

Source: FEDERAL RESERVE BOARD, THE PROFITABILITY OF CREDIT CARD OPERATIONS OF DEPOSITORY INSTITUTIONS 4 tbl.2 (June 1999) ("Average Most Common Interest Rate on Credit Card Plans, 1972-August 1994, and the Interest Rate Assessed on Accounts Incurring Interest Charges, November 1994-1998").

Year	Average Most Common Interest Rate
1972	17.21
1973	17.21
1974	17.21
1975	17.16
1976	17.05
1977	16.89
1978	17.03
1979	17.03
1980	17.31
1981	17.78
1982	18.51
1983	18.78
1984	18.77
1985	18.69
1986	18.26
1987	17.93
1988	17.78
1989	18.02
1990	18.17
1991	18.23
1992	17.78
1993	16.83
1994	15.77
1995	15.79
1996	15.50
1997	15.57
1998	15.63

Again, the graphical representation of this data is striking, as shown in Chart 3:

Chart 3: Credit Card Interest Rates, 1981-1998
Data derived from Table 3



In the brief period from 1992 to 1994, credit card interest rates fell from 18.23% to 15.77%, a drop of almost 2.5 percentage points, and a 15% fall in interest rates in a short period of time.[123] This drop appears to be responsive to competition and consumer demand. Before the early 1990s, credit card competition consisted of waiving annual fees and providing credit card program enhancements, thereby attracting primarily convenience users of credit cards.[124] This year, several large issuers made available permanent interest of 9.9% to the

[123] PROFITABILITY 1998, *supra* note 70, at 4. Some have tried to argue that this rapid fall can be attributed to a response to threats of regulation by the federal government. This theory is implausible for at least three reasons. First, is suggests an implausible degree of coordination among the thousands of issuers of credit cards to all cut their rates simultaneously. Such coordination is implausible, given the free rider and collective action problems associated with such a hypothesis. Put simply, a unilateral decision by any bank to cut interest rates in response to threats of regulation below what they could charge would reduce their profits relative to banks that did not cut their rates. Second, since that time interest rates have remained relatively stable at the new lower rate of 15-16%. Just as it would be in the interest of any individual lender not to cut rates in response to regulatory threats, lenders would have an incentive to "cheat" and raise rates in periods after the regulatory threat has subsided. This has not occurred. Finally, the theory lacks empirical credibility. As Canner and Luckett observe, two similar bills to reduce credit card interest rates were proposed in 1986, but they had no effect on credit card interest rates. Canner & Luckett, *supra* note 26, at 666.

[124] *See* PROFITABILITY 1998, *supra* note 72 at 3; Baxter, *supra* note 70, at 1017.

most creditworthy cardholders, with no annual fee and no balance-transfer requirement.[125] One industry report concludes that, "consumers are the winners in this latest interest-rate battle."[126] There is also a growing trend toward adjustable-rate cards with interest-rates that move with changes in the prime or other available rate.[127]

Thus, Ausubel is modestly correct in his observation that credit card interest rates have remained relatively stable, even though the cost of funds for credit card issuers have fluctuated over time. But his conclusion that this proves consumer irrationality and provides the basis for large issuer profits is faulty – credit card interest rates remained relatively stable even when the cost of funds rose as precipitously in the period *prior* to that studied by Ausubel. And interest rates have fallen and remained significantly lower in the period since Ausubel's study closed.

But the inference of consumer irrationality and large issuer profits is faulty on another score. Ausubel expects that changes in funding costs will be directly reflected in changes in consumer interest rates. This conclusion is incorrect. First, as suggested above, a decrease in supply costs may be passed on to consumers in a variety of forms, not just interest rates. Most notably, credit card issuers have substantially increased the services and benefits associated with credit cards, a number of which have already been detailed.[128] This includes such things as co-branding and other benefits. Second, cost reductions need not be reflected only in interest rate reductions. Issuers can extend consumer grace periods, allowing the consumer to carry an open account for a longer period of time without incurring finance charges. Perhaps the most important innovation was the rapid decline in the use of annual fees for standard credit cards

[125] Burney Simpson, *She's Real Fine, My 9.9*, CREDIT CARD MGMT., Oct. 1, 1998, at 96.
[126] *Id*.

over the past several years.[129] The elimination of annual fees, which used to be as much as $30-$50, is equivalent to a massive across-the-board rate reduction. Recalling that most credit card holders are convenience users, and likely to be indifferent to interest rate reductions, eliminating annual fees is likely to be far more attractive to the average credit card user. The hostility of consumers to annual fees is evidenced by the fact that when annual fees were first imposed, consumers canceled over nine million bank cards in 1980, amounting to some 8% of the outstanding total.[130] Thus, any discussion of the pass through of cost savings in recent years must also keep in mind the virtual elimination of annual fees. A myopic focus on interest rates alone ignores this fundamental change in the credit card market and fails to consider the full benefits and costs of using credit cards.[131]

As the cost of funds fell during the 1980s, issuers responded in a manner consistent with expressed consumer demand:

> Prior to the early 1990s, card issuers competed primarily by waiving annual fees and providing credit card program enhancements. Since then, however, interest-rate competition has played a much more prominent role. Many credit card issuers, including nearly all of the largest issuers, have lowered interest

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[127] *See* AUSUBEL, REVISITED, *supra* note 111, at 19.
[128] *See supra* notes 70-80 and accompanying text.
[129] *See* PROFITABILITY 1998, *supra* note 72, at 3 n.7 (noting that the proportion of credit card issuers reporting they do not assess an annual fee on their largest credit card plan increased from 47% on January 31, 1996 to 54% a year later); EVANS & SCHMALENSEE, *supra* note 7, at 82-83 (noting large drop in "real annual fees" from 1984 to 1992); Epstein, *supra* note 98 (noting that "as competition heated up, issuers were forced to all but eliminate the annual fees"); AUSUBEL, REVISITED, *supra* note 111, at 28-29.. Consumers will pay an annual fee in exchange for particular services, such as frequent-flyer miles, that are linked to the fee, but not for a plain-vanilla card; *The Latest Word About Annual Fees*, CREDIT CARD MGMT., Sept. 1, 1998, at 12.
[130] MANDELL, *supra* note 4, at 78.
[131] Ausubel discusses the elimination of annual fees, but doesn't seem to recognize that the reduction in annual fees should be best understood as a *de facto* interest rate reduction. *See* Auaubel, *Revisited*, *supra* note 111.

> rates on many of their accounts below the 18 to 19 percent levels commonly maintained through most of the 1980s and early 1990s.[132]

Rather than a failure of competition, therefore, the 1980s can be seen as a era of high competitive responsiveness to expressed consumer demand. As Raskovich and Froeb observe, the fact that credit card interest rates are less responsive to changes in the cost-of-funds rate also explains the seeming anomaly that consumer default rates on credit cards actually rise during periods when the cost-of-funds for issuers are falling, and vice-versa.[133] When the cost of funds rate falls, at the margin consumers will tend to make greater use of forms of credit that are more responsive to changes in the cost of funds, such as car loans, home equity loans, and the like. As a result, consumers who have many credit options will tend to turn away from credit cards and into these other forms of credit. This means that those who continue to use credit cards during this period will tend to be higher-risk borrowers who have fewer credit options. Higher-risk borrowers, therefore, will comprise a higher *percentage* of credit card borrowers in periods of falling cost-of-funds rates. As a result, default rates would be expected to rise. Rising default rates, in turn, will raise costs, partially offsetting the cost savings generated by falling cost-of-funds rates. By contrast, if the cost-of-funds rate rises, low-risk borrowers will shift away from more responsive credit vehicles at the margin, credit card defaults will tend to fall, offsetting the upward pressures on credit card interest rates. Thus, the pattern of credit

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[132] PROFITABILITY 1998, *supra* note 72, at 3.

[133] RASKOVICH & FROEB, *supra* note 70, at 7-9. Raskovich and Froeb observe that in the third quarter of 1984, when the cost of funds was 10.71% the default rate was 3.05% of outstanding credit card balances. In the third quarter of 1986, the cost of funds had fallen to 5.60% and the default rate had risen to 4.68%. As the cost of funds rose to 7.59% in the third quarter of 1988 the default rate slipped back to 3.26%. *Id*.

card use by rational consumers again helps to explain the seeming stickiness of credit card interest rates in the face of changing cost-of-funds rates.[134]

B. Are Credit Card Interest Rates "High"?

But Ausubel does not only argue that credit card interest rates are sticky, he also argues that they are sticky at "high" rates. His argument rests on the claim that credit card interest rates should move in tandem with the cost-of-funds rate and that the failure of interest rates to drop when the cost of funds did in the post-1982 period evidences that credit card issuers were reaping huge profits. Examined from the standpoint of the cost of funds, therefore, Ausubel concludes that credit card interest rates are stuck at rates "higher" than they would be in a competitive market. This argument is incorrect in that it fails to recognize cost aspects of credit card operations that distinguish them from other forms of consumer credit.

As noted previously, it has been a long-standing regularity of the credit-card market that changes in credit card interest rates seem to be relatively immune to changes in the underlying cost of funds. This is partly because of the indifference of most credit card users to interest rates as opposed to other benefits offered by credit cards, because low interest rates cause a substitution to other forms of credit, and because most consumers have evidenced a desire that cost reductions be given in the form of longer grace periods and elimination of annual fees, rather than lower interest rates. Thus, much of the stability of credit card interest rates is the result of consumer demand patterns that put a very low premium on interest rate reductions.

[134] *Id*.; *see also* Baxter, *supra* note 70, at 1017.

But there is an important supply-side dynamic to credit card operations that explains the stickiness of interest rates. Two factors are relevant and distinguish credit card operations from other forms of consumer credit. First is the fact that the cost of funds are a much smaller component of credit card costs than for other forms of credit and thus credit card interest rates should be less responsive to changes in the cost of funds than other forms of consumer lending. Second are the higher risks associated with credit card operations relative to other forms of credit.

1. Costs of Credit Card Operations

Recall Ausubel's unsupported statement that the "cost of funds is obviously the primary determinant of the marginal cost of lending via credit cards."[135] This is incorrect as the cost of funds plays a much smaller role in determining credit card interest rates than for other forms of consumer credit. Thus, credit card interest rates should be expected to be less responsive to changes in the cost of funds than alternative forms of consumer credit.

Credit cards loans are distinguishable from other forms of consumer loans by the amount of costs imposed by sources other than the cost of funds. Credit card operations require the lender to process a large volume of relatively small transactions and to service a large number of accounts. Moreover, not only are there a larger number of accounts, but the servicing of those accounts is much more intensive than for other forms of lending. For instance, when a bank grants a car loan or a mortgage, most of the administrative costs are incurred in the short period immediately prior to granting the loan. Moreover, the consumer bears many of the

costs associated with the loan application and approval process, such as a credit check and application fee. Assuming that the loan performs, post-lending administration is largely a mechanical application of payments to accounts, a routine and low-intensity job.

By contrast, credit card operations require ongoing maintenance, including the maintenance of permanent customer service and merchant service operations, fraud protection and account administration.[136] Because of these unique features of credit card lending, operating costs tend to comprise a much larger element of the cost of running credit card operations than for other forms of consumer credit. Moreover, it is doubtful that consumers would often be willing to bear many of these costs as they do with home mortgages and car loans.

Thus, for credit card issuers "[o]perating costs (including such diverse activities as servicing accounts, soliciting new customers, and processing merchant credit card receipts) accounted for nearly 60 percent of the total cost, and the cost of funds [only] 27 percent."[137] This split between the cost of funds and other elements of credit card costs distinguishes credit card operations from other forms of consumer lending:[138]

> Overall costs for mortgage, commercial, and installment loans totaled between 8 percent and 10 percent of outstanding balances. Operating expenses for these products amounted to 1.4 percent to 3.4 percent of

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[135] Ausubel, *Failure of Competition*, *supra* note 4, at 53.
[136] *See* EVANS & SCHMALENSEE, *supra* note 7, at xi (noting that the principal balance of a credit card account constantly changes as new charges and payments roll in, making credit card debt more costly to administer than other forms of debt).
[137] Canner & Luckett, *supra* note 26, at 658; *see also* Baxter, *supra* note 70, at 1016 ("[T]he cost of funds for credit card lending comprises less than half, and possibly as little as one-quarter, of total costs (compared with sixty to eighty percent of total costs for other types of bank lending) . . . .").
[138] Canner & Fergus, *supra* note 4, at 2 (noting that costs of funds "constitute a much lower proportion of total costs for credit card operations than for other major types of bank lending").

> outstanding balances and accounted for between 18 percent and 33 percent of total costs. The cost of funds, on the other hand, account for 60 percent of total expenses for installment lending, about 70 percent for commercial lending, and nearly 80 percent for mortgage lending.[139]

As a result of this marked difference in cost structure, credit card interest rates would be expected to be much less responsive to changes in cost-of-funds rates than other forms of consumer lending, such as personal loans, car loans, and mortgages.[140] Rates on other forms of consumer lending tend to rise and fall in conjunction with changes in the cost of funds, but credit card interest rates remain relatively unaffected by changes in interest rates because the cost of funds is such a small part of the overall costs.[141] As Homer and Sylla observe, consumer interest rates "contain large cost components that do not vary much, even as open market rates swing up and down. This is an important part of the explanation of why consumer credit rates are both higher and more stable over time than market rates."[142] The larger the ratio of these

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[139] Canner & Luckett, *supra* note 26, at 658; *see also id*. at 657 ("[T]he cost of funds is a relatively less important component of the total cost of credit card operations than it is for other types of credit."); RASKOVICH & FROEB, *supra* note 70, at 5 (noting that a 100-basis-point increase in the credit card cost of funds is associated with a 32-basis-point increase in the credit card interest rate, compared to an increase of 48 points for 24-month personal loan rates, a 71-point increase in new car loan rates, and a 44-point increase in mobile home loan rates).

[140] *See* Canner & Luckett, *supra* note 26, at 660 (noting that because cost of funds are a smaller proportion of overall costs, "it is more likely that noninterest costs will play a larger role, and funding costs a smaller role, in the behavior of credit card rates than in the behavior of rates on other types of lending"); Baxter, *supra* note 70, at 1016.

[141] HOMER & SYLLA, *supra* note 113, at 427 ("The pattern of new automobile and personal loan rates conforms in general to the pattern of money and bond market rates over this period, but these rates behave more sluggishly than do the open market rates, being slower to rise when market rates are trending up and slower to fall when market rates fall. Credit card plan rates, in contrast, on average moved barely at all in relation to other rates during a period that witnessed the greatest fluctuations in money and bond market rates in U.S. history.").

[142] *Id*. at 428; *see also* DeMuth, *supra* note 36, at 228 ("Processing, debt-collection, bad-debt losses, and other administrative costs incurred in providing consumer credit vary only slightly with the amount of the loan; the costs of processing a $500 loan are little different from those of a $2,000 loan. For this reason, interest rates (price as a percentage of the amount of the loan) must be higher for smaller loans in order to cover costs."); James M. Ackerman, *Interest Rates and the Law: A History of Usury*, 1981 ARIZ. ST. L.J. 61, 89 (1981) ("Administrative costs, however, are not directly related to loan size; it costs nearly as much to do the paper work on a $100 loan as on a $100,000 loan. . . . Thus, small loans are more costly to make and require a higher rate of interest.").

fixed cost components is to the cost of funds, the more resistant interest rates will be to changes in the cost of funds.[143]

Nor is this regularity a unique feature of credit cards. Interest rates on small loans of shorter duration have always been higher than longer-term, higher-value loans, primarily because of the need to recoup the costs associated with granting and servicing the loan. Thus, credit card interest rates are no more sticky than the rates on other commercial loans, once adjustments are made for differences in loan default rates.[144] Even in the Middle Ages the interest rates charged by pawnshops (including publicly endowed pawnshops) were much higher than interest rates charged on long-term loans secured by farms or estates.[145] Of course, both pawn shop loans and mortgages were secured in nature, so the difference in interest rates cannot be explained by differences in risk. Rather, short-term consumer loans were more costly to service relative to the dollar value of the loan than larger long-term loans. Homer and Sylla observe that during the Middle Ages, "[t]he reason for the higher rates [on pawnshop loans] was not primarily that the risk of making short loans on valuable security was greater than the risk of making long-term loans on homes, but rather that the cost of making many small short loans was very large."[146]

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[143] For instance, if the cost of funds is 90% of the lender's costs, a 1% drop in the cost of funds should be reflected in roughly a 90-basis-point drop in lending interest rates. By contrast, if the cost of funds is only 25% of the lender's cost, then a 1% fall in the cost of funds would reduce the lending rates only 25 basis points.

[144] RASKOVICH & FROEB, *supra* note 70, at 6-11.

[145] HOMER & SYLLA, *supra* note 113, at 424-25.

[146] *Id*. at 425.

2. Higher Risks of Credit Card Operations

Credit cards are also riskier than alternative forms of consumer credit for two reasons. First, the problems of adverse selection and post-contractual opportunism means that credit card issuers will have to assume that each borrower is high-risk (until proven otherwise) and thus will be forced to charge the highest possible interest rate to all borrowers. Because interest rates will be set according to this "worst case" scenario, they will be constrained less by the cost of funds than be constraints on borrower opportunism. Second, the unsecured nature and low-dollar value of credit card loans makes the risk of non-collection in light of default very high because it will generally not be cost-feasible to pursue collection action in most cases. These costs will be basically constant for most credit card loans, and thus also will be unaffected by changes in the cost of funds.

a) Moral Hazard and Post-Contractual Opportunism

Credit cards also present unique problems of adverse selection and post-contractual opportunism that tend to keep interest rates on credit cards at levels higher than for other forms of credit. Under the typical installment consumer loan or mortgage, the lender lends a certain amount of money based on the characteristics of the borrower, and the borrower then pays down that balance over time. Late payments and other payment problems can trigger defaults and, where the loan is secured, repossession of collateral.

Credit cards differ from the typical installment loan transaction in that the borrower is approved for a line of credit that he can draw against. At the time the loan is made, it is difficult for the card issuer to determine whether the borrower will turn out to be a good or bad risk, a

low-risk timely payer or a high-risk late payer. Confronted with the difficulty of making this determination, a rational lender would be forced to assume that all borrowers fall in the high-risk category, and will be charged a high interest rate.[147] In return, there is no way for low-risk borrowers to accurately signal their reliability to lenders, because it is too easy for high-risk individuals to disguise themselves as low-risk.[148] As a result, it would be irrational for a bank to assume that a borrower is low-risk, because there is no reliable way to ensure that the borrower will retain that status.

Once the loan is extended the threat of post-contractual opportunism is high, because once the borrower is extended credit, the creditor retains little ability to control the borrower's subsequent behavior.[149] Indeed, the incentive of the borrower to engage in post-contractual opportunism will be greatest as the riskiness of the loan increases, such as when the borrowers net worth is impaired or when his liquidity is low.[150] This aspect of credit card lending is also important in that it suggests a greater investment of resources in pre-screening and pre-approval credit checks and the like will be able to do little to reduce this far more critical form of risk of post-contractual opportunism. The post-contractual changes in circumstances that present the largest risk are the same circumstances that the card issuer will be least able to guard against when deciding to issue the credit card.

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[147] *See* Pozdena, *supra* note 4, at 2 (noting that the credit card lender must generally "assume 'worst case' exposure within each segment" of its borrowers).
[148] *See* George Akerlof, *The Market for "Lemons": Quality Uncertainty and the Market Mechanism*, 74 Q. J. ECON. 488 (1970).
[149] *See* Pozdena, *supra* note 4, at 2; Canner & Luckett, *supra* note 26, at 657.
[150] Pozdena, *supra* note 4, at 2.

Given this risk of post-contractual opportunism and moral hazard, a rational lender will "price the loan assuming maximum risk exposure."[151] Randall J. Pozdena notes that, "credit card debt interest rates must be set very high in order to compensate the issuer for the fact that users will adjust their risk in response to the price of the credit."[152] As a result, "lenders must charge considerably higher credit card rates than when lending is secured, *even to 'creditworthy' segments*."[153]

Thus, it is instructive that to the extent that credit card interest rates have fallen, they have tended to fall selectively, rather than across the board.[154] Offering lower rates to all would create an adverse selection problem of attracting high-risk borrowers. Instead, issuers are increasingly offering initial higher rates, but are reducing the interest rates for long-standing customers who prove their reliability over time through their patterns of timely payments.[155] Presumably this preferred status can be forfeited if the borrower moves from a low-risk profile to a high-risk profile. It is predicted that these segmented rate structures linked to cardholder riskiness will become increasingly widespread in the future.[156] This does not change the fundamental dynamic, however, that rational card issuers must assume unproven cardholders to be high-risk borrowers until proven otherwise. Thus, generally stated interest rates are likely to

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[151] *Id*.
[152] *Id*.
[153] *Id*. (emphasis added).
[154] PROFITABILITY 1998, *supra* note 72, at 3 ("Some issuers have segmented their cardholder bases according to risk characteristics, offering reduced rates to existing customers who have good payment records while maintaining relatively high rates for higher-risk, late-paying cardholders."); Canner & Luckett, *supra* note 26, at 665; Pozdena, *supra* note 4, at 2 (noting that credit card companies try to identify consumer segments that pose lower risks of default, to whom they charge lower rates).
[155] *See* Canner & Luckett, *supra* note 26, at 666 ("Some of the largest national issuers have segmented their cardholder bases according to risk characteristics, offering reduced rates to a select group of existing customers who have good payment records; higher-risk late-paying customers are still charged higher rates.").

remain high, even as proven low-risk customers increasingly receive better terms. But note that this adverse selection problem does not dampen competition, it just leads to competition on alternative margins.

b) Other Factors Increasing Credit Card Risk

Other factors make it more difficult to recoup expenses associated with credit card loans. For instance, bank installment loans often include extensive individual credit investigations that are charged to the borrower as a flat fee to cover the cost of the credit investigation.[157] Credit card issuers do not have this option – there is little reason to believe that the average consumer would be willing to pay $50 or more simply to enable the card issuer to perform a credit check before applying for a credit card. Nor could the card issuer afford to pay this cost, as the cardholder may never use the card and can cancel it at any time. In an attempt to perform an adequate credit check and to keep costs down, credit card issuers have come to rely increasingly on a concept called "credit scoring," whereby a central clearinghouse essentially performs a single credit check and converts the information into a standardized format that will enable the prospective credit card issuer to get a rough-and-ready estimate of the individual's creditworthiness.[158]

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[156] *Id*.

[157] DeMuth, *supra* note 36, at 228.

[158] *See* EVANS & SCHMALENSEE, *supra* note 7, at 56 (noting that credit scoring has made it easier to weed out high credit risks). *See also* Loretta J. Mester, *What's the Point of Credit Scoring?, in* BUS. REV., at 3 (Federal Reserve Bank of Phila., 1997) (discussing descriptions of the techniques and benefits of credit scoring), *available in* 1997 WL 26069203; Paul Muolo, *Building a Credit Scoring Bridge*, U.S. BANKER, May 1, 1995, at 71, *available in* 1995 WL 8301430. Some bankruptcy judges have declared this system of credit scoring to be an inadequate safeguard and have suggested that a full-blown credit check must be done before issuing a credit card. Insisting on a full-blown credit check rests on a fundamental misunderstanding of the nature of the credit card industry.

The problem of credit card riskiness is compounded by the difficulty of enforcing credit card obligations in the case of default. Although there has been some development of secured credit cards in recent years, most credit card debt is unsecured.[159] The unsecured status of credit card loans makes them riskier and more difficult to collect than secured consumer loans. Where collateral is provided, an otherwise higher-risk borrower can reduce the creditor's risk of nonpayment upon default and signal his credit-worthiness, thereby reducing his interest rate. Unsecured credit card lenders, however, cannot avail themselves of the debtor's collateral, but must instead pursue the debtor through collection remedies. Given the small value of most credit card purchases and the consumptive nature of many of them (food, travel, and entertainment) it is simply not feasible for the credit to take a security interest in most of the things purchased with credit cards.[160] Given the debtor's relatively unfettered ability to file bankruptcy and discharge this debt by paying little or none of it,[161] credit card issuers will have little ability to collect any judgment against the debtor. Moreover, given the hostility of many judges to actions by credit card issuers to have credit card debts declared nondischargeable, this theoretical avenue will rarely offer solace to the credit card issuer.[162]

These problems are further exacerbated by the fact that the amounts owed by debtors to particular credit card issuers are often relatively small. Debtors often will owe several credit issuers a few thousand dollars apiece, rather than owing one credit card issuer a large amount. Again this distinguishes credit card loans from car loans and home equity loans or mortgages. The fact that any one creditor often will be owed a relatively small amount of money makes it

[159] Canner & Luckett, *supra* note 26, at 657; EVANS & SCHMALENSEE, *supra* note 7, at xi.
[160] Pozdena, *supra* notes 4, at 2.

likely that the creditor will not find it cost-feasible to pursue the debtor for collection, as the transaction costs of collecting, such as court costs and attorneys' fees, will often make the project infeasible. The uneconomic nature of collecting on many credit card defaults further increases the risk of credit card lending. Although the credit card lender can use the threat of impaired credit ratings as an *ex ante* device to reduce the incentives for debtor misbehavior, threats to credit, impair the credit rating of a borrower who has already defaulted does not assist in the actual recovery of outstanding balances.[163] Thus, the risk of *collecting* on a default for credit cards is high relative to other forms of credit.

The presence of these unique risks goes along way towards explaining the stickiness of credit card interest rates and their indifference to changes in the cost of funds. Economist Randall Pozdena built a model that incorporated these risks and found a very high correlation between predicted and actual credit card interest rates from 1972 to 1991. As Pozdena observes, "[t]he parameters of the underlying model are consistent with the representation of credit card debt as costly-to-service, unsecured credit extended to relatively high-risk borrowers. Specifically, the loan seems to be priced as if the lender perceived the debt as poorly collateralized or costly to service, and the variance of the borrower's net worth [i.e., risk of post-contractual opportunism] as high."[164] Rejecting Ausubel's hypothesis of borrower irrationality, Pozdena concludes that "the high, and insensitive, credit card rates are consistent with the pricing of risky credit in an atmosphere of moral hazard and costly collateralization or service. The fact that credit card issuers that do offer lower rates do so only to more carefully

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[161] *See* Jones & Zywicki, *supra* note 1, at 185 (summarizing studies).
[162] *See supra* note 377, and accompanying text.

selected consumer segments also is consistent with the risk management model employed here."[165]

C. Consumer Irrationality

Ausubel contends that a consumers are irrational, in that they routinely underestimate their credit card balances. But like the other elements of Ausubel's argument, the "underestimation hypothesis" has also been shown to be incorrect.

It is difficult to imagine that Ausubel could be right that more than a trivial number of credit card holders chronically underestimate how much they owe on their credit cards. It has been observed:

> The problem with this argument is that it depends on cardholders persistently misperceiving their own behavior. Although it may be reasonable to believe that many consumers first acquire a card with erroneous expectations about their future payment habits, it is harder to argue that they will in fact regularly revolve their balances and yet maintain the assumption that they will not do so in the future. At some point, it would seem, such cardholders might recognize their actual payment patterns and seek out a low-rate card – if, that is, dollar differences in interest costs were really large enough to matter to them.[166]

Empirical evidence also tends to rebut Ausubel's belief that credit card users are uniquely irrational consumers. Cargill and Wendel conclude, for instance, that "households currently anticipate whether credit cards will be used to obtain revolving credit, in contrast to

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[163] *See* Pozdena, *supra* note 4, at 2.
[164] *Id*. at 3.
[165] *Id*.; *accord*, RASKOVICH & FROEB, *supra* note 70, at 9 (rejecting Ausubel's hypothesis of failure of competition in the credit card market).

Ausubel's assertion of consumer irrationality."[167] Anecdotal evidence reinforces this view that consumers are much more sophisticated and knowledgeable about their own finances than Ausubel gives them credit for.[168]

Nor is it clear why this "certain peculiarity of cardholder psychology"[169] should be unique to credit card transactions. Why wouldn't consumers also chronically underestimate their monthly mortgage payments, car payments, or student loan payments?[170] Why don't these same people chronically bounce checks in the belief that they have more money in their checking accounts than they think they do? Why don't they chronically underwithhold on their taxes and pay penalties every year? Ausubel provides no explanation for why credit card transactions are uniquely susceptible to these problems of underestimation, as opposed to all these other situations where similar considerations apply. Indeed, he admits to remaining troubled by the underestimation hypothesis.[171]

IV. Credit Card Profits

At the root of all of the discussion of consumer irrationality and the like is the belief that credit card operations generate permanent profits, meaning supranormal returns above competitive equilibrium. Under this view, regulation of credit card activity is believed to have no negative efficiency effects, and just constitutes a wealth transfer from credit card issuers to credit

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[166] Canner & Luckett, *supra* note 26, at 665.
[167] Cargill & Wendel, *supra* note 4, at 386.
[168] *See* discussion at *infra* notes 251-53 (discussing so-called "card surfers" and "vampiric" card customers).
[169] Canner & Luckett, *supra* note 26, at 665.
[170] Ausubel refers to this problem in his working paper, but he doesn't really provide an explanation for this anomaly. Indeed, his attempt to validate the underestimation hypothesis is confused by ambiguities in consumer responses to the relevant questions. AUSUBEL, REVISITED, *supra* note 111, at 25.
[171] AUSUBEL, REVISITED, *supra* note 111, at 1 & n.1

card users. To the extent that credit card issuers compete in a competitive market, however, regulation will upset competitive equilibrium, resulting in dead-weight efficiency losses that harm issuers and consumers alike. Thus, this is the cornerstone of the attack on credit card issuers. On investigation, however, the accusation that credit card issuers are reaping large profits also turns out to be false.

A. Market Structure

1. The Credit Card Market Is Structurally Competitive

The idea that credit card issuers could possibly be reaping permanent profits when viewing competition in the credit card market is implausible on its face. As Brito and Hartley phrase the burden on those seeking to prove this belief, "Several authors . . . have argued that even though the market for bank credit cards is unregulated, has thousands of independent firms, many of them recent entrants, and has millions of consumers, it nevertheless appears to be noncompetitive."[172] Between 1988 and 1991, the number of companies issuing credit cards grew from approximately 4,000 to 6,000.[173] In August 1998, the Federal Reserve noted that, "currently roughly 6,800 depository institutions issue VISA and MasterCard credit cards and independently set the terms and conditions on their plans. Close to 10,000 other institutions act as agents for card-issuing institutions."[174] And these figures do not even include large non-bank

[172] Brito & Hartley, *supra* note 3, at 400; PROFITABILITY 1998, *supra* note 72, at 3 (noting that "aggressive competition" has led to substantial shifts in the credit card market). *See also* Canner & Fergus, *supra* note 4, at 2 ("It seems doubtful that the increase in profitability reflects diminished competition in the credit card industry in light of the number and variety of credit card issuers.").
[173] Brito & Hartley, *supra* note 3, at 425 n.23.
[174] PROFITABILITY 1998, *supra* note 72, at 3 n.6.

issuers, such as, American Express and Dean Witter (Discover Card), which are carried by millions of other consumers. In addition, recent decades saw the entry into the credit card market of powerful non-financial institutions, such as AT&T, General Electric, and General Motors.[175] Barriers to entry into the credit card business are extremely low[176] and issuers are atomistically competitive.[177] Admission to the Visa and MasterCard networks is extremely inexpensive.[178] Given the large number of atomistic competitors and the low barriers to entry, the credit card industry appears to be as close a representation to a perfectly competitive market as one could possibly imagine.[179] As a result, any monopoly rents would be expected to be readily competed away by existing and new entrants into the market.[180]

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[175] *See* Macey & Miller, *supra* note 10, at 253 (observing that, as of the time they wrote their article, 37 of the top 105 largest issuers of credit cards were not banks, but diversified financial services companies); Baxter, *supra* note 70, at 1013 (noting that AT&T, General Electric, and General Motors all made heavily supported investments in entering the credit card market and were successful in rapidly building a customer base); EVANS & SCHMALENSEE, *supra* note 7, at 74. *See* Rougeau, *supra* note 63, at 6 (suggesting that non-bank card issuers continue to have a substantial presence as credit card issuers). There are even reports that Microsoft is developing a "smart card" that will rival traditional electronic transaction media such as debit cards and credit cards. *See* Joseph McKendrick, *Behind Microsoft's Smart Card Strategy*, CREDIT CARD MGMT., June 1, 1999, at 78.

[176] Ausubel, *Failure of Competition*, *supra* note 4, at 56 n.17 (noting that entry into the credit card business is relatively easy, demonstrated by individual retailers and other commercial entities offering credit card plans).

[177] William J. Kolasky, *Network Effects: A Contrarian View*, 7 GEO. MASON L. REV. 577, 613 (1999); DeMuth, *supra* note 36, at 222 ("The supply of credit card credit from banks, retailers, ad others is not at all concentrated. Indeed, it is intensely competitive, approaching the textbook example of an 'atomistic' market.").

[178] Kolasky, *supra* note 177, at 613.

[179] *Id*. ("The issuers . . . compete in a nearly perfectly competitive market."); EVANS & SCHMALENSEE, *supra* note 7, at x ("The payment card business is one of this country's more competitive industries."); Baxter, *supra* note 70, at 1011 (noting that the structure of the credit card market creates a presumption that it is competitive). The market also appears to have a typical level of concentration for a competitive market. *Id*.; EVANS & SCHMALENSEE, *supra* note 7, at 7; *Id*. at 70-71.

[180] *See* Kolasky, *supra* note 177, at 613; Canner & Fergus, *supra* note 4, at 3 ("The diversity of credit card pricing schemes, the heavy volume of solicitations, and the pace of entry by new competitors seem inconsistent with a general absence of competition.").

Nonetheless, some commentators continue to insist that monopoly rents are present in the credit card market.[181] How this can be so is rarely explained, it is simply asserted as accepted fact and deplored. Upon scrutiny, however, both the factual and theoretical bases for this view breaks down.

2. Entry Has Dissipated Any Profits

Consider first the factual assertion that credit card issuers are reaping huge and permanent profits from their operations, thereby evidencing a lack of competition in the credit card market.[182] This conclusion is riddled with errors.

It is possible that credit card issuers earned some profits during the early 1980s, as consumer demand for credit cards exploded while credit card costs fell.[183] Under conditions of falling supply costs and dramatically increased demand, profits may be available for some period of time. But these profits also encouraged entry into the credit card industry by new issuers, competing away those profits. As Diane Ellis summarizes the situation, "[t]he opportunity to earn high profits has attracted intense competition, which appears to be eroding some of the high profits earned in the 1990s . . . ."[184] From 1993 to 1997, pre-tax returns on

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[181] *See* Ausubel, *Failure of Competition*, *supra* note 4; Ausubel, *Credit Card Defaults*, *supra* note 79; Elizabeth Warren, *The Bankruptcy Crisis*, 73 IND. L.J. 1079, 1082-83 (1998) [hereinafter Warren, *Bankruptcy Crisis*]; Teresa Sullivan, Elizabeth Warren, and Jay Westbrook, *From Golden Years to Bankrupt Years*, NORTON BANKR. L. ADVISER, July 1998, at 1, 10 [hereinafter Teresa Sullivan] (claiming that credit card operations are "twice as profitable" as other banking sectors).

[182] Warren, *Bankruptcy Crisis*, *supra* note 181, at 1082-83; *Bankruptcy Revision: Hearing on H.R. 833 Before the Subcomm. on Commercial & Admin. Law of the House Comm. on the Judiciary*, 106th Cong. 1 (1999) [hereinafter Lee, *Hearings*] (testimony of Hon. Joe Lee).

[183] *See* EVANS & SCHMALENSEE, *supra* note 7, at 93.

[184] *See* Dianne Ellis, *The Effect of Consumer Interest Rate Deregulation on Credit Card Volumes, Charge-Offs, and the Personal Bankruptcy Rate*, *in* BANK TRENDS at 1 (Department of Ins., FDIC No. 98-05, 1998); *see also* EVANS & SCHMALENSEE, *supra* note 7, at xii ("Professor Ausbel looked solely at the industry's most profitable years – the mid-1980s. The payment card industry was, indeed, unusually profitable at that

credit card operations by "credit card banks" were almost cut in half, falling from 4.06% to 2.13%.[185] Stuart Feldstein of SMR Research similarly noted that from 1994 to 1996, "after-tax profits as a percentage of average managed assets declined from 2.26% to 1.31%."[186] Returns from credit card operations appear to have increased somewhat in 1999, partly as a result of tightening lending standards and increased fees on delinquent cardholders, and partly as a one-time jump in profits from several large industry acquisitions of existing accounts from firms exiting the industry.[187] Other commentators have reported similarly moribund returns to the industry in recent years.[188] Thus, to the extent that accounting returns remain higher than other sectors of banking activity, this difference has narrowed substantially. In his most recent article (published in 1997), Ausubel updates his previous comparison of returns in the credit card industry with those of the overall banking industry.[189] In Figure 7 of that article, Ausubel

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time, following a decade of low profits. However, the high profits of the mid-1980s did not last for long. As in any competitive industry, new businesses started chasing those profits, as did existing businesses. Consequently, profits have fallen back since then.").

[185] PROFITABILITY 1998, *supra* note 72, at 3 tbl.1.

[186] *The Rise in Personal Bankruptcy: Hearings Before the Subcomm. On Commercial & Admin. Law of the House Comm. on the Judiciary*, 105th Cong. 1 (1998) [hereinafter Feldstein, *Hearings*] (statement of Stewart Feldstein, President, SMR Research Corp.).

[187] FED. RESERVE BD., THE PROFITABILITY OF CREDIT CARD OPERATIONS OF DEPOSITORY INSTITUTIONS 3 (June 1999) [hereinafter PROFITABILITY 1999].; *see also* Zandi & Chen, *supra* note 78, at 11 (noting tightening of lending standards by credit card issuers). Several large card issuers have exited the credit card industry as a result of large losses. The acquiring company often sees a one-time profits boost from these acquisitions, as they acquire the outstanding cardholders and outstanding balances. This is a less expensive way to acquire good accounts than being forced to go out and solicit new accounts with the expense and risk associated with signing up new cardholders. *See* Steve Jordon, *First National Seeks Growth Opportunities*, OMAHA WORLD-HERALD, June 17, 1999, at 20 [hereinafter Jordon, *First National*] (noting one-time jumps by First National Bank of Nebraska by acquiring portfolios from other issuers).

[188] *See* Linda Punch, *Subprime's Dangerous Waters*, CREDIT CARD MGMT., Mar. 1, 1998, at 77 (reporting after-tax return of 1.2% in 1996); Daly, *Back From the Brink*, *supra* note 77, at 54 (noting a 1.5% return for 1997).

[189] Ausubel, *Credit Card Defaults, supra* note 79, at 259 fig.7. Even more remarkably, when Ausubel testified before Congress in March 1998, he again presented data on credit card profitability only through 1993, although by that time he had available updated data that was available all the way through 1997. *See* Ausubel, *Hearings*, *supra* note 75. In fact, he presents data on several other issues that are complete all the way through 1997. Ausubel, *Credit Card Defaults*, *supra* note 76, at 250 figs.1 & 2. Yet again he provides no explanation for this selective presentation of data on this one point – credit card profitability – alone.

presents data from the period 1971-1993. Calling the evidence "fairly striking," he reaffirms his prior conclusion that credit card issuers are making large and permanent profits.[190] Interestingly, however, he presents data only until 1993 on credit card returns. This selective presentation is intriguing in that his Figures 1-6 in the article present data all the way up to 1996, thereby including the most recent data available when he published the article in 1997. Data for the later years certainly must have been available to Ausubel when he constructed Figure 7 (just as for Figures 1-6), yet he provides no explanation for why he chose to exclude that data from his paper. Thus, the data he presents ends with the year 1993, the year of peak returns in the credit card industry, and excludes the subsequent tumble in credit card profitability. He provides no explanation for excluding the information that returns on assets dropped significantly in the years following 1993.[191]

B. Accounting Returns Are Not Economic Profits

Most calculations of credit card profits also tend to overstate the profitability of credit card operations.[192] For instance, the Federal Reserve's measurement only includes "credit card banks," which they define as commercial banks that have assets greater than $200 million, have the bulk of their assets in consumer loans, and have 90% of their consumer lending in credit

[190] Ausubel, *Credit Card Defaults, supra* note 79, at 259 fig.7.
[191] Despite the incomplete data reported by Ausubel, others have uncritically relied on Ausubel's conclusions as if they accurately represent the current credit card market. *See* Henry J. Sommer, *Causes of the Consumer Bankruptcy Explosion: Debtor Abuse or Easy Credit?*, 27 HOFSTRA L. REV. 33, 37 (1998).
[192] *See* EVANS & SCHMALENSEE, *supra* note 7, at 91 ("Claims that the payment card industry makes exorbitant profits, however, are dubious because they are based on estimates that do not treat capital and depreciation properly and do not assess payment card lending risks."). *See also* RASKOVICH & FROEB, *supra* note 70, at 11 n.10 (noting Ausubel's initial conclusions on credit card profitability are plagued with sampling bias in the banks selected, as he chose unusually profitable credit card banks for his study).

cards and related plans.[193] In 1997, only thirty-six banks qualified as credit card banks under this narrow definition and the institutions included in the survey change over time. This narrow definition of "credit card banks" tends to overstate earnings in the credit card industry. Such a narrow definition also excludes non-bank issuers, such as industry also-ran Discover Card, which despite having established a considerable cardholder base has "operated solidly in the red for most of its short history."[194]

The accounting method used to measure profits from credit card operations also tends to overstate the returns to the credit card sector of banking activities. The standard measure that is used is return-on-assets, measured by accounting revenues minus costs divided by outstanding balances. But credit card operations use many assets that are unique to credit card operations and which do not count as capital assets under the standard measure. For instance, heavy expenditures on marketing and advertising during the start-up phase of the business are not classified as capital assets, even though they obviously produce a stream of revenue that is consistent with thinking of them as capital assets.[195] As a result, capital expenditures for credit card operations tend to be underestimated, artificially inflating accounting profits.[196]

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[193] PROFITABILITY 1998, *supra* note 72, at 5 tbl.2.
[194] MANDELL, *supra* note 4, at xxii.
[195] Baxter, *supra* note 70, at 1018. For instance, it cost Dean Witter about $285 million in total to start up the Discover Card operations, but this resulted in $11.5 billion in accounts outstanding in 1991. EVANS & SCHMALENSEE, *supra* note 7, at 64-66. *See also* RASKOVICH & FROEB, *supra* note 70, at 11 n.10 (noting exclusion of intangible assets such as advertising capital from accounting profit measures).
[196] RASKOVICH & FROEB, *supra* note 70, at 11 n.10. Some critics of the credit card industry appear to be unaware of the difference between the concepts of economic "profitability" and the accounting concept of "return on assets." *See* Teresa Sullivan, *supra* note 181, at 10 (claiming that credit card operations are "twice as profitable" as other bank sectors, although the underlying data provides information only about accounting rates of return in various sectors).

More fundamentally, this narrow focus overstates credit card profits first by looking at *ex post* rates of profit, rather than *ex ante* risk-adjusted profits, and second, by examining only the most successful issuers in the market and ignoring the less-profitable market participants.

1. Ex Ante *v.* Ex Post *Profits and the Need for Risk Adjustment*

Traditional measures of credit card profitability overstate credit card profits by using an *ex post* analysis of credit card profitability, rather than an *ex ante* risk-adjusted measure.[197] Credit card loans are inherently more risky than other forms of consumer credit because of their unsecured nature and their small value, which makes collection lawsuits unfeasible in most cases.[198] As a result of this higher risk, credit card issuers maintain significantly higher than average equity-to-asset and loan-loss-reserves-to-total-loan ratios than for other operations.[199] The higher risk of credit card operations also makes the cost of capital for credit card operations higher than for other forms of bank credit.[200]

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[197] *See* Joseph F. Sinkey, Jr. & Robert C. Nash, *Assessing the Riskiness and Profitability of Credit-Card Banks*, 7 J. FIN. SERV. RES. 127, 136 (1993) (concluding that higher return-on-assets of credit-card banks comes at the expense of greater risk in terms of greater volatility in returns and increased probability of default risks); *id*. ("The higher accounting returns of [credit card banks] . . . come at the expense of greater risk.").

[198] *See supra* notes 147-65 and accompanying text; *see also* EVANS & SCHMALENSEE, *supra* note 7, at 55-56 ("When cardholders default, payment card issuers must engage in expensive collection procedures. Collection costs are often high relative to the amount of the defaulted loan. Moreover, the liberalization of bankruptcy laws has probably increased the rate of consumer defaults and made collection harder."). One study estimates that credit card lending is at least three to four times riskier than conventional bank lending. *Id*. at 45 (citing Frederick R. Warren-Boulton & Lawrence H. Meyer, *The Economics of Credit Card Interest Rate Caps*, MiCRA, Inc. (Jan. 26, 1993)).

[199] *See Delinquency on Consumer Loans: Hearings Before the House Comm. on Banking and Fin. Servs.*, 104th Cong. 1 (1996) (statements of Lawrence B. Lindsey) [hereinafter, Lindsey]; Sinkey and Nash, *supra* note 197, at 137; *see also* EVANS & SCHMALENSEE, *supra* note 7, at 98 ("Being riskier than bank lending operations in general, payment card operations may well require more equity than do other types of lending.").

[200] EVANS & SCHMALENSEE, *supra* note 7, at 45 & n.155 (noting that as of March 1991, the cost of capital for credit card operations was approximately 17.5%, the cost of capital for banks as a whole was about 16.1%, and the cost of capital for the market as a whole was about 15.4%); Sinkey and Nash, *supra* note 197, at 139.

Looking at high *ex post* profits also obscures the fact that what is relevant should be expected profits *ex ante*, which must be adjusted for riskiness.[201] The higher risk associated with credit card operations means that on average credit card issuers will have to receive a higher return to bear this risk.[202] As Lawrence Lindsey has noted:

> The strong earning profiles of the credit card banks, and their associated capital and reserve allocations, are reflections of the risks associated with this form of lending. Higher risk and higher return go hand-in-hand, and the higher capital and reserves associated with this form of credit are required to balance the risk. Put another way, lenders active in the credit card business are conscious of higher potential loss rates and expect returns that will fully absorb these losses and still provide an adequate profit margin.[203]

Risk is a gamble. Because of the generally robust economy in recent years, higher-risk lending has turned out to be more profitable than lower-risk lending – after the fact.[204] However, this does not alter the conclusion that these returns could have been much lower or even negative, as they were throughout the late-1970s and early-1980s.[205] For similar reasons, returns on credit card activities also tend to be much more volatile than for other sectors of banking activity.[206] Thus, even if *ex post* returns have been higher than in other sectors of bank

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[201] Ausubel recognizes this problem and has provided an updated analysis that attempts to adjust for risk. AUSUBEL, REVISITED, *supra* note 111, at 9-16. Nonetheless, he still examines an arbitrarily short time period, and fails to account for transaction costs. *Id*.

[202] *See* Baxter, *supra* note 70, at 1019.

[203] Lindsey, *supra* note 199.

[204] Ausubel, *Credit Card Defaults*, *supra* note 79, at 253 (noting that "credit card defaults fluctuate substantially with the business cycle"); *id*. at 254-56; EVANS & SCHMALENSEE, *supra* note 7, at 99 ("When the economy is booming, charge-offs tend to be low. When the economy is crashing, charge-offs tend to be high.").

[205] Similarly, *ex post* accounting returns on Internet "dot-coms" have exceeded those on Blue chip stocks in recent years. Nonetheless, few would quarrel with the idea that Internet stocks are riskier than General Motors, and that any measure of economic profits must consider that risk.

[206] Canner & Luckett, *supra* note 26, at 661; Ausubel, *Credit Card Defaults*, *supra* note 79, at 259 fig. 7; EVANS & SCHMALENSEE, *supra* note 7, at 93 (noting that the profitability of credit cards has been more

activity, this does not prove that *ex ante* risk-adjusted returns are supranormal. This volatility in returns over time also increases the importance of reviewing a sufficiently long period of time to determine the average return on credit card operations, rather than the small and unrepresentative time period chosen by Ausubel for study.[207] Once a reasonable time frame is studied, it is evident that the "profitability of the credit card business is in line with that of other bank lending activities" for the period from 1974-1993.[208]

2. Traditional Measures Focus Only on Successful and Profitable Issuers

This focus on *ex post* returns, combined with the small number of "credit card banks" generally examined, also tends to overstate credit card profitability. Large credit card banks have traditionally solicited more marginal credit risks than small banks and also charged higher rates to compensate for holding this higher risk.[209] Again, this means that if those accounts *ex post* turn out to perform better than expected, then returns will also be higher than expected.[210]

Standard measurements have tended to overstate those profits by focusing on only the largest and most-profitable issuers (*ex post*). It is evident that profits and losses have not been

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variable than for other types of consumer lending and that the standard deviation of the rate of return is more than double that for installment loans).

[207] *See* EVANS & SCHMALENSEE, *supra* note 7, at 99-100 ("To provide any information about persistent profits, the measure of profitability would have to be analyzed over the entire business cycle.").

[208] Baxter, *supra* note 70, at 1013-14; *see also* EVANS & SCHMALENSEE, *supra* note 7, at xii ("The fact is that profits on credit card loans have, historically, been in line with other consumer loans."); *id*. at 93 ("The average historical rate of return on credit cards [from 1974-1991] has been slightly lower than on other bank lending to consumers. Credit card lending had an average return of 2.16 percent, compared with 2.33 for installment loans such as automobile loans.").

[209] Canner & Luckett, *supra* note 26, at 662; MANDELL, *supra* note 4, at 89.

[210] Canner & Luckett, *supra* note 26, at 662 ("Consequently, it would be expected that when the economy is performing well . . . issuers that bear more risk would outperform more conservative issuers. In weak economic periods, . . . however, the performance of large issuers would be expected to suffer from sharply rising credit losses.").

evenly distributed throughout the credit card industry. For instance, credit card activities have tended to be less profitable for smaller issuers than for larger ones.[211] Unable to compete effectively, several major credit card issuers have curtailed their operations in recent years,[212] including such industry giants as Wells Fargo[213] and powerful non-bank entrants such as AT&T.[214] As one industry analyst observes:

> The bank card industry seems to be dividing into a society of haves and have-nots. On the one hand, there are the monoline credit card issuers and a handful of card operations owned by large banks. Many of these card programs reported profit increases of 20% or more in 1997 despite high chargeoffs and record consumer bankruptcies. On the other hand are the great majority of card issuers that are experiencing poor or mediocre returns.[215]

Industry analysts expect that as some of these weaker issuers exit the market, competition will be increasingly fierce as the remaining firms "fight tooth and nail with each other for every customer."[216] They add that, as a result of this fierce competition, profit margins have dropped substantially and card issuers have continued to try to innovate to make their products more attractive to customers than rival cards.[217] Moreover, home equity loans have provided a powerful competitive rival, drawing customers away from credit-cards and into tax deductible,

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[211] PROFITABILITY 1998, *supra* note 72, at 2 n.3.
[212] *See* Epstein, *supra* note 98 (listing several "mid-sized issuers" who exited the industry in the face of losses or rising costs).
[213] *See* Mark Calvey, *Bank Wooing Continues, But On New Terms?*, 18 BUS. J. PHOENIX, Jan. 30, 1998, at 30.
[214] *See* Feldstein, *Hearings*, *supra* note 186 (noting that AT&T had to sell its Universal Card operation as a result of large losses).
[215] Daly, *Back From the Brink*, *supra* note 77, at 54. *See also* PROFITABILITY 1998, *supra* note 70, at 3 ("[O]ver the past several years, competition has led to substantial shifts in market shares among the industry's largest firms.").
[216] Epstein, *supra* note 98.
[217] *Id*.

lower-interest rate home equity loans.[218] Thus, competitive pressures have also developed from outside the credit card industry.

3. Interbank Premia on Credit Card Sales Have Dissipated

Ausubel also claims that alleged premia on interbank sales of credit card accounts evidences that even *ex ante* the market expects supranormal returns on credit card operations.[219] But this argument fails to account for the higher transaction costs associated with credit card operations.[220] Thus, the higher amounts paid on interbank sales of accounts probably simply reflect the savings on transaction costs of the purchasing bank.[221] Like profits generally, the era studied by Ausubel also was an era of uniquely high premia on the prices paid for credit card portfolios. Soon afterwards the prices of credit card portfolios "dropped precipitously."[222]

If it were true that credit card issuers had market power, then it would also be difficult to explain why credit card issuers *lost* money in the 1970s and early-1980s when there were significantly fewer card issuers and consumers presumably were less experienced with credit card use.[223] It could be that increased experience with credit cards have somehow made

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[218] Jordon, *First National*, supra note 187, at 20.
[219] Ausubel, *Failure of Competition*, *supra* note 4, at 67.
[220] *See supra* notes 135-46 and accompanying text; *see also* Jones & Zywicki, *supra* note 1, at 239. Ausubel's revised study also fails to adjust for savings in transaction costs. *See* AUSUBEL, REVISITED, *supra* note 111, at 12-15.
[221] Brito & Hartley, *supra* note 3, at 424.
[222] EVANS & SCHMALENSEE, *supra* note 7, at 93-94.
[223] Ausubel, *Credit Card Defaults*, *supra* note 79, at 260; Ellis, *supra* note 184, at 4 (noting losses on credit card operations in the late 1970s); MANDELL, *supra* note 4, at 154 (noting that bank cards either lost money or were only marginally profitable for most of the 1960s and 1970s); EVANS & SCHMALENSEE, *supra* note 7, at 39 (noting erosion of profits by the early 1970s).

consumers dumber rather than smarter in their credit card use. Such an unusual thesis would seem to be somewhat difficult to argue.

C. The Credit Card Market Is Dynamically Competitive

Even a cursory glance at the history of the credit card industry in recent years also rebuts the idea that the industry is noncompetitive. The credit card industry has proven itself to be one of the most dynamically competitive in the economy. Heated competition, mergers, and entry of new firms (including many non-financial firms) has caused rapid changes in industry structure and leadership. The Federal Reserve notes, "[o]ver the past several years, competition has led to substantial shifts in market shares among the industry's largest firms."[224] Indeed, in just a decade the entire structure of the industry has changed, reflecting robust competition:

> Issuers need look back no further than the onset of the 1990s for a textbook case of such an occurrence. At the time, money center banks were the dominant issuers, thanks to the resources brought on by their size. Despite their power, they had become lethargic, charging interest rates of 18.9% or 19.8% and $20 annual fees for plain-vanilla cards. When the specialty card issuers, such as Household, AT&T, and First USA, began shaking up the business with contrarian marketing strategies that eliminated annual fees, slashed interest rates, and offered cardholders rich rewards for using their cards, the money centers were not creative enough to counter the assault on their domain.[225]

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[224] PROFITABILITY 1998, *supra* note 72, at 3.

[225] Peter Lucas, *An Irresistible Force?*, CREDIT CARD MGMT., Jan. 1, 1998, at 34; *see also* EVANS & SCHMALENSEE, *supra* note 7, at x ("The risks in this industry are perhaps best appreciated from the fact that the oldest payment card pioneer, Diners Club, is a minuscule player in the market today. Risks are also apparent from the recent entry of large industrial companies such as AT&T, whose success has come partly at the expense of the original pioneers.").

This heated competition led to a precipitous loss of market share for many former goliaths of the credit card industry, including such leading banks as Bank of America, Chase, and others. Of the leading banks, only Citicorp "managed to hold its place in the standings, but its growth rate in recent years has lagged that of the specialists."[226] In short, recent experience indicates that the credit card industry is highly competitive and that industry leaders can hold their posts only by responding to consumer demand, or they will be quickly displaced by others.[227] In addition, trade reports indicate that those who have prospered have done so through responsive customer service and provisions of valuable co-branding and other ancillary benefits.

D. Are Consumer Search and Switch Costs High?

Ausubel claims that the low apparent barriers to entry do not guarantee that that the credit card market will be sufficiently competitive nor that consumers will benefit from the competition. He contends that consumer "switch costs" are high, meaning that it will be difficult for new entrants to attract customers. According to Ausubel, a credit card firm can create a base of "loyal customers" who will stick with them, even if better alternatives are available. These customers can be exploited by the card issuer, enabling the issuer to reap supranormal profits off them.[228] This purported explanation for alleged profits in the credit card market also appears to be incorrect.

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[226] Lucas, *supra* note 225, at 34.
[227] PROFITABILITY 1998, *supra* note 70, at 3 (noting variety of ways that growing credit card issuers have attracted new customers, such as offering lower-rate cards, low-rate balance transfers, new co-branding strategies, and rebates).
[228] Ausubel, *Failure of Competition*, *supra* note 4, at 69.

First, the structure of the credit card industry has undergone a dramatic transformation in the past decade.[229] New entry into the market has created a massive shake-up, as industry leaders only a decade ago have fallen behind new entrants. In the past decade, most of these gains in market share have come from inducing customers to change cards, rather than from signing up new customers. Instead, it is almost certainly the case that new entrants have earned market share by stealing customers from their old issuers. Moreover, many of these gains have come through innovative marketing techniques, such as attractive co-branding benefits or low introductory periods on interest rates, indicating that the new entrants are providing customers with desired card features and that customers will readily change cards in response to such offers.[230]

Nonetheless, Ausubel asserts that the "credit card industry is a business where both search costs and switch costs are likely to be especially prevalent,"[231] an assertion that he repeats in his 1997 article.[232] Ausubel offers five reasons for his belief that both search and switch costs are likely to be high in the credit card market:

> (a) the information cost of discovering which banks are offering lower interest rates; (b) the cost of time, effort, and emotional energy in filling out an application for a new card (and possibly getting rejected; (c) the fact that the card fee is usually billed on an annual basis, so that if one switches banks at the wrong time, one forgoes some money; (d) the perception that one acquires a better credit rating or a higher credit limit

[229] *See supra* notes 224-28 and accompanying text (discussing entry of major new credit card issuers who have replaced traditional industry leaders).
[230] PROFITABILITY 1998, *supra* note 72, at 3.
[231] Ausubel, *Failure of Competition*, *supra* note 4, at 69.
[232] Ausubel, *Credit Card Defaults*, *supra* note 79, at 263.

> by holding the same bank's card for a long time; and (e) the time lag between applying for a card and receiving one.[233]

Perhaps this description of high switch costs was accurate in 1991, although it is questionable. Even if it was accurate in 1991, it is especially dubious today. Indeed, it is apparent that to the extent that these costs are high for consumers, much of the efforts of credit card marketers have been aimed at trying to reduce them. In their quest to steal customers away from existing issuers, new entrants have had built-in incentives to reduce these search and switch costs for the customers that they seek. Consider each of these factors in turn.

1. Information Costs

Ausubel states that there are high information costs associated with learning about competitors' lower interest rates. This claim is simply baffling. It has long been understood that a primary purpose of advertising is to reduce consumers' information costs.[234] Credit card companies sent out some 3.45 billion credit card solicitations in 1998 by direct mail on top of 3 billion in 1997, and 2.4 billion in 1996,[235] not to mention amounts spent on telephone marketing, print advertisements, and other promotional activities.[236] Overall, credit card issuers spent upwards of $550 million per year in 1993 and 1994, and surely that figure has continued to rise since that time.[237] Moreover, credit card customers seek and respond to information that they find relevant. As noted earlier, convenience users choose their cards on the basis of no annual

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[233] Ausubel, *Failure of Competition*, *supra* note 4, at 69.
[234] *See* Lester G. Telser, *Advertising and Competition*, 72 J. POL. ECON. 537 (1964); Yale Brozen, *Advertising as an Impediment to Competition*, *in* INDUSTRIAL CONCENTRATION: THE NEW LEARNING (Harvey J. Goldschmid, et. al. eds., 1974).
[235] Leslie Beyer, *Return to Sender*, CREDIT CARD MGMT., Apr. 1, 1999, at 33.

fees and for ancillary benefits, such as insurance and co-branding benefits. Larger revolvers, by contrast, have evidenced an ability to seek out and act upon information regarding interest rates.[238] I personally receive several direct mailings per month from credit card companies, and I am not alone, all of which either prominently display special interest rate offers or a special affinity or co-branding offer.[239] Indeed, the more common complaint seems to be that there is too much advertising and direct mail by card issuers, not too little.

The credit card market is awash in information about credit card interest rates and benefits. The large amounts spent on advertising and direct mail evidences the heated competition of the credit card market, and the efforts to cannibalize existing market leaders by inducing consumers to switch cards. These advertising expenditures are a clear attempt to reduce the very information costs that Ausubel and others bemoan.[240] Credit card advertising through direct mail also appears to be of unusually high quality, proving substantially greater amounts of information than advertising for many other products such as automobiles, tennis

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[236] *See* NATIONAL BANKR. REVIEW COMM'N, BANKRUPTCY: THE NEXT TWENTY YEARS 92 (1997) [hereinafter NBRC].

[237] *See* AUSUBEL, REVISITED, *supra* note 111, at 32.

[238] Much of the dynamism of the credit card market is attributable to new entrepreneurial firms attracting market share through sophisticated efforts to make their products appealing to consumers. PROFITABILITY 1998, *supra* note 72, at 3.

[239] *See* Reich, *supra* note 62, at 15A (noting volume of card solicitations, all of which offer a variety of benefits, including a cell phone, an introductory interest rate, and extra frequent flyer miles).

[240] *See* Sommer, *supra* note 191, at 37; NBRC, *supra* note 236; Charles A. Doctor, *Impact of Credit Card Use on Consumer Bankruptcies*, AM. BANKR. INST. J., Feb. 17, 1998, at 42 (criticizing credit card companies' "aggressive marketing tactics"). It is evident that Ausubel misunderstands the role of advertising and direct mail in the credit card industry. At the same time he bemoans the high search and switch costs in the industry, he inexplicably thinks of advertising costs as pure "deadweight loss." *See* Ausubel, *Failure of Competition*, *supra* note 4, at 75. Most economists long ago rejected this idea. *See* Telser, *supra* note 234; Brozen, *supra* note 234; Jack Hirshleifer, *Where Are We in the Theory of Information?*, 63 AM. ECON. REV. PROC. 31, 37-38 (1973).

shoes, soft drinks, or beer.[241] Although issuers tout "prestige" cards, such as gold cards and platinum cards, most of these so-called prestige cards also offer substantial benefits that are not otherwise available, such as car rental insurance and higher credit lines. Thus, it appears that card issuers are competing for customers primarily on the basis of their product quality, rather than through image advertising that provides little direct information.[242]

Most of these advertising efforts are also aimed at *existing* credit card holders, rather than new recipients. The credit card industry is saturated, and has been so for quite some time.[243] By 1984, already 71% of American families owned some type of credit card,[244] and that number has not grown substantially since that time.[245] From 1970 to 1986, the proportion of families owning a bank card grew from 16% to 55%.[246] It is likely that every credit worthy individual who wants a credit card already has at least one. Thus, the increase in credit card ownership primarily has resulted from an increase in the number of cards held by existing card holders, not from an increase in the number of individuals holding cards.[247] In 1998, the

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[241] Beyer, *supra* note 235, at 33 (noting that direct mail enables card issuers to make "a fairly complicated pitch," unlike other forms of advertising).

[242] Of course, image advertising provides valuable indirect information to consumers regarding the quality of the product advertised. *See* Benjamin Klein & Keith B. Leffler, *The Role of Market Forces in Assuring Contractual Performance*, 89 J. POL. ECON. 615 (1981); Paul Milgrom & John Roberts, *Price and Advertising Signals of Product Quality*, 94 J. POL. ECON. 796 (1986).

[243] MANDELL, *supra* note 4, at 84 (observing that the credit card market was already reaching its saturation level by 1986). Evans and Schmalensee state that the market was already saturated by 1985. EVANS & SCHMALENSEE, *supra* note 7, at 33. *See also* PROFITABILITY 1999, *supra* note 187, at 5 n.10 (noting that the response rate on credit card solicitations ran at about 2.5% from 1990 to 1993, and has generally been half that figure since that time, suggesting that there are few untapped sources of credit-worthy consumers who want credit cards who do not already want them).

[244] MANDELL, *supra* note 4, at 153.

[245] *See* Jordon, *First National, supra* note 187, at 20 ("Nearly 80 percent of Americans already have at least one credit card . . . and the others probably shouldn't have one.").

[246] PROFITABILITY 1999, *supra* note 187, at 5.

[247] *See* Peter S. Yoo, *Still Charging: The Growth in Credit Card Debt Between 1992 and 1995*, REVIEW (Federal Reserve Bank of St. Louis), Jan.-Feb. 1998, at 19, 27. The fact that consumers can hold and use more than one credit card at a time renders inapposite Ausubel's analogy between switch costs in the credit card and long-distance telephone markets because, while a consumer can have only one long-distance

average cardholder held 4.2 credit cards per person.[248] More intuitively, the standard offer to transfer existing balances from an old card to a new card only makes sense if the consumer actually owns an old card in the first place.[249]

In this saturated market, increases in market share by one issuer almost certainly are the result of stealing customers from some other issuer. Card issuers are churning over the same customers, and existing card holders are showing a willingness to switch in response to a better offer.[250] The comments of one credit card marketing consultant are illustrative of difficulties faced by card issuers in attracting and retaining customers. "I call it vampire loyalty," he says. "The more the credit companies use promotional offers to draw customers in, the more loyal they become to the promotion rather than the core product. On one level, the response rates are good because of the churn effect, but because customers are vampires, loyalty remains low because they just go to the next good offer."[251] For households that own more than one card, of course, it should be very easy to switch card use to the card that offers the best terms.

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phone company, she can simultaneously be the customer for several credit card companies. *See* Ausubel, *Credit Card Defaults*, *supra* note 79, at 263.

[248] PROFITABILITY 1999, *supra* note 187, at 5. Mandell notes that by the mid-1980s consumers already carried an average of three credit cards. MANDELL, *supra* note 4, at 80.

[249] A recent survey suggests reports that last year 19% of consumers transferred balances from one card to another, but that this figure has fallen to 15% in the past year, and that the average balance transfer interest rate has fallen from 7.5% to 6.9%. *Whither Balance Transfers?* CREDIT CARD MGMT., Apr. 1, 1999, at 14. Industry analysts conclude that the drop in transfers has resulted from "competition among credit card issuers for the same customers." *Id*.

[250] Contrary to Ausubel's belief that consumers face high switch costs, industry participants complain of their inability to keep consumers "captured" once they switch. As one credit card marketing expert notes, large amounts of direct mail "is leading to so-called churn, which is when customers bounce from one credit card to another to get the best offers. The loyalty is to the offer, rather than the card brand. As a result, retention rates are extremely low, which is a problem for many issuers." Beyer, *supra* note 235, at 33; *see also supra* notes 247-49 and accompanying text (discussing "card-surfing").

[251] Beyer, *supra* note 235, at 33 (quoting David Brown of Ogilvy One Worldwide).

In short, the attack on credit card issuers for their direct mail policies seems to make no sense at all.[252] Nonetheless, it seems that virtually every article on consumer bankruptcy contains some notice of the large volume of direct mail sent annually by the credit card industry. The credit card market has been saturated for many years and every credit worthy person who wants a credit card already has one. Thus, the likely effect of credit card advertising is simply to increase competition, increase consumer information, and redistribute credit card users among various issuers, rather than increasing the pool of credit card users generally. For those who already own a credit card, informative direct mail solicitations appear to have only one effect – to benefit consumers by increasing competition in the credit card industry by reducing consumer switch costs.[253]

2. Fear of Rejection

Ausubel claims that a second factor that keeps search and switch costs high are the costs of filling out an application for a new card and possibly being rejected.[254] It is because responding to direct-mail solicitations requires effort on the borrower's part that yield rates for direct mail solicitations are much lower than for other forms of marketing, such as telephone solicitations.[255] Despite this low yield rate, direct mail remains the most reliable way of obtaining

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[252] *See* Rougeau, *supra* note 63, at 33 (criticizing credit card issuers for "bombarding consumers with direct mail solicitations offering credit cards"). Indeed, it would seem to make as much sense to attack Lands End and L.L. Bean for sending catalogues informing consumers of the items they sell.

[253] *See* DONNA CRAIG VANDENBRINK, THE EFFECTS OF USURY CEILINGS: THE ECONOMIC EVIDENCE 29 (Federal Reserve Bank of Chicago, Working Paper Series, Feb. 1982) ("What can be stated definitively, however, is that from the point of view of protecting borrowers from unreasonable interest charges, competition is desirable, and the more the better.").

[254] Ausubel, *Failure of Competition*, *supra* note 4, at 69.

[255] *See* Daly, *Saving*, *supra* note 99, at 68; Chuck Paustian & Kelly Shermach, *Tough Times in Card Marketing*, CREDIT CARD MGMT., May 1, 1998, at 42, (noting that the overall response rate for direct mail

information on the customer's finances that will allow an issuer to decide whether to supply a card, thus the additional expense and lower yield rate from direct mail is presumably warranted. Direct mail is also thought to be the best way to make the detailed and complicated sales pitch associated with credit cards.[256] Moreover, many credit card applications are now "pre-approved," minimizing the risk of rejection to the customer and thereby giving the consumer the incentive to pursue the application.[257] Again, it appears that credit card issuers have reduced the application costs of a credit card significantly. Indeed, the more common complaint is that the convenience of direct mail solicitations and pre-approved status make it "too easy" to receive a credit card today, rather than too difficult, as suggested by Ausubel.

3. Billing of Annual Fees on an Annual Basis

Ausubel also points to the fact that annual fees are billed on an annual basis as a further obstacle to switching to a better card. In the last decade, annual fees on credit cards have

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solicitations fell to 1.3% in 1997, the lowest level ever tracked by Mail Monitor tracking service, and down from 1.4% the previous year, with the drop attributable to the "clutter" of multiple competing offers by issuers). At the symposium at which this article was presented, Judge Samuel L. Bufford argued that this low yield rate could potentially act as a barrier for new market entrants, by making it costly to attract customers. Of course, one alternative would be to simply purchase existing accounts from other card issuers. That aside, Judge Bufford raises an intriguing thesis. While my intuition differs from his, I have seen no empirical or anecdotal evidence, one way or the other, on this point. Consequently, I stand by the consensus view that barriers to entry are low; however, I recognize the possibility that subsequent empirical evidence may rebut this conclusion.

[256] *See supra* note 241 (discussing advantages of direct mail).

[257] Apparently the proliferation of pre-approved credit solicitations is the result of federal regulations that forbids the provision of credit information to third parties without an individual's consent, unless the information is provided in connection with "firm offers of credit." *See* AUSUBEL, ADVERSE SELECTION, *supra* note 66, at 3.

largely disappeared.[258] Thus, the concern about losing money on an annual fee, is no longer a concern for most credit card users.

4. Advantages of Long-Term Card Ownership

Ausubel also argues that there is a perception that one acquires a better credit rating or a higher credit limit by holding the same bank's card for a long time. It may be the case that when an individual switches to a new card in the short run he suffers some reduction in his credit limit. Given that credit limits have generally risen in the past decade, however, it is open to question whether this factor places much of a constraint on the decision to switch cards. One suspects that for the large majority of card owners, this is not a factor. More likely, as suggested earlier, a rational credit card owner will be reluctant to switch to an unproven card issuer where the consumer has been generally pleased with the quality of the incumbent card. But if the incumbent card is providing high-quality service, it is not clear that there is any welfare loss from reluctance to switch to a new untested card issuer.

5. Time Delays in Receiving a New Card

Finally, Ausubel claims that there is a time lag between applying for a card and receiving one. Anyone who has applied for a credit card recently is well-aware that this time lag is almost always quite short, a few weeks at most. Moreover, it is not clear that this is really much of a

[258] EVANS & SCHMALENSEE, *supra* note 7, at 82. There may be some charges associated with accessing ancillary services, such as frequent flyer accounts, travel agent services, and the like. But these fees are all optional and can easily be forgone. As for standard credit card accounts, annual fees have largely disappeared. *Id*.

practical problem. Most card owners actually own two or more cards already.[259] As a result, switching cards is as simple as taking one card out your wallet rather than another. When combined with the elimination of annual fees on most cards, this means that the cost of carrying a provisional card is effectively zero. For most credit card users, therefore, there is effectively *no* time lag associated with switching cards, because they almost always have at least one other card standing by to be used whenever desired. Thus, the short waiting period between applying for and receiving a new card imposes small actual costs on the ability of consumers to switch cards in response to a more attractive offer.

6. Conclusion: Search and Switch Costs in the Credit Card Market Are Low and Falling

In short, Ausubel's armchair empirical claim that "both search costs and switch costs are likely to be especially prevalent" lacks foundation. Indeed, new entrants into the market have energetically and creatively acted to reduce these barriers so as to make it easier to attract new customers. The search and switch costs of the credit card industry seem to be quite low and have led to heated competition among issuers to try to steal customers away from their rivals.[260]

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[259] *See supra* notes 243-48 and accompanying text (noting that most cardholders own several cards).

[260] As Charles A. Doctor accurately notes, "[t]he credit card companies have been saturating the public with their aggressive marketing tactics as they engage in a fierce competitive struggle for market share." Doctor, *supra* note 240, at 42; *see also* Sommer, *supra* note 191, at 36 (noting "massive marketing of credit card"). In general, competition is thought to help consumers by driving down costs and increasing quality. Thus, it is puzzling that neither Doctor nor Sommer provides an explanation for how competition in the credit card market could be thought to be harmful to consumers. As Ausubel suggests, reductions in information costs should increase competition, thereby helping consumers. Ausubel, *Failure of Competition*, *supra* note 4, at 75.

Ausubel relies on his belief in high search and switch costs as one of his explanations for why competition has not eliminated economic rents to credit card issuers. His explanations for why search and switch costs may be high have been shown to be wanting. Thus, he also lacks a theoretical explanation for how the credit card market could be noncompetitive. In short, the credit card industry is highly competitive and it is obvious that consumers have benefited mightily from this competition.

E. Post-Mortem on the Failure of Competition in the Credit Card Industry and Issuer Profitability

Reviewing the evidence, therefore, it is time to lay to rest the theses of consumer irrationality, high profits, and the failure of competition in the credit card industry that fuel Ausubel's thesis. Each element of Ausubel's argument has been questioned by more thorough subsequent analysis and testing.[261] He has presented suspect conclusions based on incomplete and questionable data. Given the flaws in his analysis, and the almost uniform rejection of his conclusions in subsequent studies, the widespread acceptance of his thesis in the bankruptcy community may be little more than political wishful-thinking.[262] It is time for the bankruptcy

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[261] The only study that has not rejected Ausubel's thesis completely is that of Calem and Mester. *See generally* Paul S. Calem & Loretta J. Mester, *Consumer Behavior and the Stickiness of Credit-Card Interest Rates*, 85 AM. ECON. REV. 1327 (1995) (claiming to offer support on the narrow issue of whether credit cards have high search and switch costs).

[262] A search of Westlaw's TP-ALL database on April 19, 2000 reveals that Ausubel's credit card articles have been cited an astonishing 41 times in law reviews and related publications. His article on credit card defaults has already been cited 26 times since its publication in the 1997 volume of the *American Bankruptcy Law Journal*, and his 1991 article has been cited 15 times. By contrast, Brito and Hartley's article in the *Journal of Political Economy* has been cited just twice, once by me in a previous article. Cargill and Wendel's article has been cited just once, again the one time being by me. Canner and Luckett's comprehensive criticism of Ausubel's initial article was published in 1992 and has received a mere three cites in the law review literature, again with one of those being in a previous article by me. Raskovich and Froeb's article has been cited once previously in law reviews. Bankruptcy judges have shown a similar preference for Ausubel's article over that of his critics. In the realm of congressional testimony, a Westlaw

community to set aside this model of the credit card market and consumer rationality and analyze these issues according to a full and unbiased assessment of the economics of credit cards and the credit card market.

At root there are only two possible scenarios: either the credit card industry is fundamentally competitive or it is fundamentally noncompetitive. In order to conclude that the credit card industry is noncompetitive and that permanent profits are possible, several conditions are necessary. On the issuer side, it is necessary to believe that an entire industry could be noncompetitive despite the presence of 6,000 atomistic competitors, low barriers to entry, actual entry by several extremely powerful companies (such as AT&T and General Motors), and a large amount of fluctuation in the identities of the market leaders. On the consumer side, it is necessary to believe that consumers irrationally underestimate their credit card balances month after month and year after year, and that this irrationality is unique only to credit cards and not to any other form of consumer credit. On the other hand, one could conclude that the credit card market is actually as competitive as its market structure suggests, that *ex post* accounting measures of profits are flawed measures of actual risk-adjusted profitability, and that credit card use reflects rational consumer use given the alternatives available. Clearly the competitive scenario is more plausible than the noncompetitive scenario. Given that the presence of persistent profits is a necessary condition for acceptance of the critics' case for the culpability of credit card issuers in the bankruptcy boom, this would seem to cast fatal doubt on their case.

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search reveals a 10-1 count in favor of Ausubel's articles versus those of all his critics combined. Such one-sided citation numbers for Ausubel's articles without even acknowledging the existence of his multiple

V. Usury Regulations and the Misunderstood Role of *Marquette*

Starting from the assumption that the credit card market is noncompetitive and that issuers reap large and permanent profits, members of the bankruptcy community have leaped to the conclusion that the source of this mischief was the Supreme Court's decision in 1978 in *Marquette National Bank v. First of Omaha Service Corp*.[263] At that time, many states had usury restrictions in place that limited the interest rates that could be charged on consumer loans, including credit card operations. It was these limits on interest rates that were primarily responsible for the losses suffered in the high-inflation, high-interest rate years of the 1970s. Confronted with an inability to cover their costs, bank card issuers responded by retrenching their operations and reducing their now-unprofitable credit card operations.

In *Marquette*, the Supreme Court held that the applicable usury ceiling in a credit card transaction was the usury limit of the state where the card *issuer* was located, rather than the state where the card *customer* was located. The result was a rapid move to states such as South Dakota and Delaware, states with very high or even no usury ceilings. Many other states quickly raised their usury ceilings to prevent this migration, especially those with a substantial banking presence.[264] By locating in high-ceiling states, *Marquette* essentially deregulated the

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critics is reflective of the selective nature of legal scholarship on the credit card issue. Search of WESTLAW, TP-ALL, (Apr. 19, 2000).

[263] Marquette Nat'l Bank v. First of Omaha Serv. Corp., 439 U.S. 299, 99 S. Ct. 540 (1978).

[264] DeMuth, *supra* note 36, at 213 ("[B]etween 1979 and mid-1985, eighteen states relaxed their rate controls and another sixteen states repealed their controls outright.").

interest-rate component of credit cards and enabled card issuers to directly avoid traditional usury restrictions and to "export" their interest rates.

Critics claim that *Marquette*'s functional deregulation of credit card interest rates led to high and permanent credit card profitability that competition has been unable to temper.[265] As we already have seen, it is incorrect to conclude that profits in the credit card industry have been high and permanent, especially when adjusted for the *ex ante* riskiness of credit card operations and when studied over an appropriate length of time. This Section demonstrates that the impact of *Marquette* on credit use and profitability has also been fundamentally misunderstood. Contrary to the conventional wisdom, *Marquette* did not lay a foundation for runaway bank profits and consumer suffering. Rather, by eliminating archaic and largely ineffective usury restrictions, *Marquette* increased efficiency and competition in the credit card industry, made the market more responsive to consumer demand, and provided large benefits to consumers.

A. Was *Marquette* Irrelevant?

As an initial matter, it is difficult to understand how *Marquette* could have had *any* effect on credit card interest rates and credit card profits, as interest rates did not actually rise following *Marquette*. As has been noted, the alleged effect of *Marquette* was to keep interest rates *the same* as they were previously, even though the cost of funds was falling. But usury ceilings generally were a cap set on interest rates at a *fixed* rate – indeed, this is the explanation

[265] Ausubel, *Credit Card Defaults*, *supra* note 79, at 261; Lee, *Hearings*, *supra* note 182; Teresa Sullivan, *supra* note 181, at 10 (suggesting that deregulation of the credit card industry has led to high profitability from credit card operations).

for why credit card issuers were unable to raise their rates during the high interest rate period of the late-1970s and early 1980s. Thus, the only effect of usury ceilings was to keep rates from rising above a fixed level. Usury ceilings were fundamentally irrelevant to the issue of whether rates should subsequently fall *below* that level as the cost of funds fell. *Usury regulations are simply irrelevant to the question of what is the appropriate interest rate at rates below the usury cap*. Thus, the entire argument about the effect of *Marquette* on subsequent interest rates and credit card profitability appears to be based on the logically flawed premise that usury regulations would even apply to the transactions in question.[266]

B. A Short History of Usury Regulations

Assuming that *Marquette* and state usury regulations even have some relevance to the question at hand, it is evident that its importance has been generally misunderstood. Western financial and legal systems have a long history of intermittent attempts to regulate maximum interest rates. Credit itself is as ancient as humanity. Credit long predates industry, banking, coinage, and probably even money.[267] Homer and Sylla observe, "Loans at interest may be said to have begun when the Neolithic farmer made a loan of seed to a cousin and expected more back at harvestime."[268]

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[266] In addition, courts routinely enforce choice-of-law provisions that enable contracting parties to evade state usury laws. *See generally*, ERIN ANN O'HARA, OPTING OUT OF REGULATION: A PUBLIC CHOICE ANALYSIS OF CONTRACTUAL CHOICE OF LAW (George Mason Univ. Sch. of Law, 2000).

[267] HOMER & SYLLA, *supra* note 113, at 3.

[268] *Id.*; *see also* Marion Benfield, *Money, Mortgages, and Migraine–The Usury Headache*, 19 CASE W. RES. L. REV. 819, 822 (1968) ("Credit is almost certainly as old as organized society, and, unless human nature has changed more than seems likely, the first interest was charged at about the time the first loan was made.").

Efforts to regulate the terms of these loans followed soon thereafter.[269] As early as 1800 B.C., the Code of Hammurabi contained statutory limitations on interest rates.[270] The Code permitted wife, concubines, children, and slaves to be pledged as collateral, but limited personal slavery for debt to three years.[271] Ancient Athens, by contrast, eliminated both interest rate ceilings on debt as well as personal slavery for debt.[272] Rome limited interest rates to 8 1/3%, but permitted personal slavery for debt.[273]

These legal caps on interest rates usually had little practical effect. When the legal rate was higher than the prevailing market rate they were irrelevant; when market rates were higher than the legal rate, the legal rate was usually simply ignored.[274] For instance, the limits set by Hammurabi apparently were much higher than prevailing Babylonian interest rates.[275] When market rates rose above Hammurabi's limits, however, those limits were simply ignored.[276] Market forces similarly kept Roman interest rates well below the statutory cap, but when interest rates rose, the Romans simply refused to enforce the limits.[277] As old as attempts to regulate usury are comparable attempts by market forces to escape usury regulations.

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[269] *See* Benfield, *supra* note 268, at 822 ("The lessons of history concerning legislative attempts to fix interest rates have not yet been learned. . . . [S]tatutes prohibiting the taking of interest or regulating interest rates never seem to have been effective when they ignore the realities of money market behavior, but, in this country at least, they are still being tried.").
[270] HOMER & SYLLA, *supra* note 113, at 3 (limits of 33 1/3% on loans of grain, repayable in kind, and 20% for loans of silver).
[271] *Id*.
[272] *Id*.
[273] *Id*. While crude, it appears that all of these early civilizations recognized that a trade-off exists between interest rates and collateral (albeit a very barbaric form of collateral – personal slavery). Unlimited interest rates went hand-in-hand with the abolition of slavery for debts, whereas ceilings on interest rates were accompanied by the possibility of slavery for failure to repay. *Id*.
[274] Ackerman, *supra* note 142, at 75.
[275] *Id*. at 67.
[276] *Id*.
[277] *Id*. at 70.

Perhaps the watershed event in the history of usury was the theological disputes over whether interest of any kind should be charged on debts. Although Middle Age church teaching banned lending money for interest, "usury was always present in Medieval Europe."[278]

But unlike Babylon and Rome, the power of the church in the Middle Ages made it difficult to simply ignore the restrictions on usury when they became inconvenient. As a result, lenders and borrowers had to devise more creative ways of evading usury restrictions. The lengths to which they went to avoid these restrictions demonstrates the power of the market in the lending sphere and the difficulties of regulation. For instance, medieval merchants could avoid religious prohibitions on usury by writing a note in one currency and promising repayment some time later in another currency at a vastly inflated exchange rate, making the whole thing look suspiciously like the payment of interest.[279] Such ingenious devices as the "triple contract," "rentes," and "interesse" were also used to evade usury restrictions.[280] Given the strength of the invisible hand in bringing lenders and borrowers together, the imagination of market participants always outran the ability of regulators to prevent these deals from occurring. As one commentator has summarized the world's long history of failed attempts to regulate interest rates;

> The demand for loans cannot be legislated away; yet lenders are understandably reluctant to risk their capital in interest-free loans when profits can be obtained elsewhere. Doubtless, there were always some high-minded people who lent to the needy out of a spirit of brotherhood. Generally, though, self-interest is

[278] *Id*. at 73.
[279] *Id*. at 76.
[280] *See* Ackerman, *supra* note 138, at 75-77 (describing these, and other mechanisms, for evading medieval usury restrictions); Benfield, *supra* note 268, at 823.

> highly corrosive of moral principle. Needy borrowers found that they must either pay interest or do without the loan.[281]

The Reformation blessed the practice of charging interest, and England eventually led the way in abolishing all fixed legal limits on the rate of interest.[282]

In the United States, however, usury laws setting fixed maximum rates of interest were made an early part of the law and continued intermittently for much of American history. For much of that time, these interest rate ceilings were irrelevant, as the legal rate of interest was set at levels higher than the prevailing market rate of interest. When not irrelevant, they were evaded. As in the Old World, attempts to regulate interest rates in America were unsuccessful almost from the beginning. During the colonial era, Benjamin Franklin reported that interest rates routinely exceeded legal limits, leading a modern commentator to conclude that colonial "usury laws seem to have been widely evaded."[283] Efforts during the post-Revolution era also met with little success, as "during hard times, the usury limits were evidently ignored."[284] Similar efforts to regulate usury and similarly poor results continued through the Civil War. Finally, in the post-Civil War era, many states simply gave up on the effort to regulate interest rates, leading to widespread increases or elimination of rate ceilings by the turn of the century.[285] Those that did not effectively eliminate ceilings riddled them with exceptions that stripped them of much of their effect.[286]

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[281] Ackerman, *supra* note 142, at 65.
[282] HOMER & SYLLA, *supra* note 113, at 4.
[283] Ackerman, *supra* note 142, at 85.
[284] *Id*. at 85-86.
[285] *Id*. at 87.
[286] *Id*.

Ironically, when market rates of interest rose such that these usury limitations actually were relevant, states quickly moved to raise or abolish the interest rate ceilings so that they no longer placed a constraint on the market.[287] To the extent that these interest rate ceilings were not simply evaded through other terms of the contract, they had the effect of restricting access to credit for many people who needed it. As a result, where the usury rates actually constrained interest rates they also constrained access to credit and created other market distortions. Thus, they were unpopular with the public and were quickly eliminated or amended. A common approach to the problem was to create a series of exceptions to the usury restrictions, thereby allowing interest rates to rise to their market levels and consumers to shift into those markets where the exceptions controlled. Thus, it has been observed that "[s]ince colonial times, the history of American usury law has been a history of exceptions. By the 1950s, these exceptions threatened to overwhelm the rule. Although nearly all states retained a general usury limit, regulation was increasingly provided by a bewildering and disorganized array of statutory exceptions."[288]

Various lenders were also frequently excepted from the general usury laws. Many states excepted credit unions, savings and loans, and industrial banks from the reach of usury laws.[289] Some states took bank loans out from the reach of usury laws and pawnbrokers were

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[287] For instance, prior to *Marquette* a number of states had already moved to phase out credit card interest rates caps in response to high inflation and interest rates. *See* Canner & Luckett, *supra* note 26, at 654.
[288] Ackerman, *supra* note 142, at 94. The ready availability of alternative unregulated sources of credit may help to explain why the primary effect of *Marquette* has been to reallocate borrowing among different types of consumer credit, rather than an overall increase in consumer credit generally.
[289] *Id*.

covered by a wholly different body of county or city laws.[290] In 1968, usury laws applied to less than half of America's credit.[291]

Among those who generally were covered, however, were credit card issuers. As unprecedented interest rates during the 1970s drove the cost of funds higher for banks, bank card issuers were unable to raise interest rates on their cards to rates that would make them profitable.[292]

C. The Problems of the pre-*Marquette* Regime

The ease with which usury restrictions can be evaded should not be surprising. Lending presents a paradigm application of Coasian bargaining in a context of low transaction costs. Experiments with rent control, price controls on gasoline, and other forms of price controls have repeatedly shown the futility of regulating any single term of a multi-term transaction. Price controls have several inevitable consequences. In the short run, by keeping prices below their market-clearing level, they increase demand for, and decrease supply of, the product in question, thereby creating shortages.[293] Gasoline lines provide a memorable reminder of failed efforts at price controls. In the longer run, however, they cause adjustments in other terms of the contract so as to push the *overall* price back to equilibrium. Thus, when gasoline prices were regulated, consumers were forced to pay by waiting in line, an irrational and inefficient mechanism for reestablishing equilibrium. This adjustment will be especially rapid in situations

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[290] *Id*.
[291] *Id*.
[292] DeMuth, *supra* note 36, at 215; *id*. at 229 (discussing lack of profitability of credit card operations in the late 1970s and early 1980s).
[293] *Id*. at 217.

such as bank lending, where lenders and borrowers can readily alter the terms of the contract at the time they enter into the deal. The end result is the restoration of equilibrium at the same overall market price, but a loss in efficiency and consumer welfare.

Efforts to regulate interest rates on consumer loans in the pre-*Marquette* era were not immune from these perverse and wasteful results.[294] Unable to respond to increasing cost of funds, bank card issuers responded by initiating annual fees for cardholders and adopting more restrictive lending policies.[295] Thus, bank card issuers responded to the inability to interest rates at their competitive level in two predictable ways: by restricting supply of the regulated form of credit and by altering other terms of the credit card agreement so as to try to close the remaining gap between supply and demand.[296] Banks reduced supply by curtailing their bank card operations during the 1970s because of their inability to make a profit.[297] Given that lower-income individuals will generally have less access to alternative competitive sources of credit,[298]

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[294] Summaries of several economic studies of the various effects of interest rate limitations on various forms of consumer credit during the pre-*Marquette* era can be found in VANDENBRINK, *supra* note 253, at 8-21. For instance, the practice of paying "points" on home mortgages appears to have evolved as a means of evading usury restrictions on home mortgages. *See* Benfield, *supra* note 268, at 860-61. However, as Benfield notes, a consumer is likely to prefer simply paying the market rate of interest on a loan, rather than being forced to resort to the subterfuge of "points" in order to obtain a loan. *Id*. As Benfield further summarizes, "usury statutes in the home mortgage field have no effect until general interest rates reach a level near the usury rates; then their effect is to (1) drive lenders to more or less deceptive ways of avoiding the usury limitations, and (2) drive money out of the home mortgage market." *Id*. at 864.

[295] *See* Canner & Luckett, *supra* note 26, at 654.

[296] Usury limitations in the mortgage market in the 1970s had a similar effect in the mortgage market as that predicted here. Thus, economist James R. Ostas found that "legal restrictions on contract interest rates resulted in the noninterest rationing of borrowers through (1) the requiring of higher loan fees, (2) the requiring of higher downpayments, and (3) the requiring of shorter loan maturities." Lenders also responded to interest rate ceilings by making fewer loans. *Id*. James R. Ostas, *Effects of Usury Ceilings in the Mortgage Market* 31 J. FIN. 821, 831 (1976). Ostas' results substantially mirrored a similar earlier study. *See* Philip K. Robins, *The Effects of State Usury Ceilings on Single Family Homebuilding*, 29 J. FIN. 227 (1974).

[297] *See supra* notes 119-21 and accompanying text.

[298] *See supra* notes 47-62 and accompanying text.

this constriction in card supply likely caused harm to the very low-income consumers that usury controls are ostensibly designed to help.[299]

Card issuers also attached annual fees to customers accounts as a mechanism for evading usury restrictions. As noted earlier, consumers have repeatedly expressed their dislike for annual fees as a component of credit card terms.[300] By forcing bank card issuers to impose annual fees rather than raise interest rates, it is evident that the direct effect of usury limitations on credit card operations was to reduce consumer welfare by forcing banks to offer a less attractive product than they could in a deregulated market. Christopher DeMuth observes that suppliers will respond to price controls on one term of its product:

> by raising prices in ways that are not controlled by the regulatory program. . . . If such pricing responses are feasible, price controls will be circumvented. Consumers will be worse off than before, however, since the new pricing system will be less efficient and hence more costly than the one it replaced. If the alternative pricing system were less costly, it could and presumably would be introduced absent the controls.[301]

Deadweight loss inevitably results, imposing a tax paid by borrowers and lenders alike.

Issuers adopted several other innovations to evade usury limits, all of which worked to the detriment of consumers. For instance, banks altered their methods of calculating interest charges, moving from the adjusted balance method, which calculated interest on the balance at the time payment was due, to the average daily balance system, which assessed interest from

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[299] *See* DeMuth, *supra* note 36, at 240.
[300] *See* discussion *supra* notes 130-32 and accompanying text.
[301] DeMuth, *supra* note 36, at 217. DeMuth provides the example of the bizarre and otherwise inexplicable practice of commercial banks to give free toasters or coffee makers to new depositors during the era of regulated rates on bank savings deposits. *Id*. This practice has disappeared now that banks may pay depositors market rates of interest. *Id*.

the date a charge was made.[302] They also started marketing other products and services, such as insurance, with monthly statements; they bundled credit cards with a variety of other bank services, such as checking and check-cashing cards, and offered the complete package to customers; and they started selling customer lists to mailing houses, a practice so distasteful that is was eventually outlawed.[303]

Usury limitations also created a subsidization from convenience users of credit cards to revolvers. All users, regardless of whether they revolved debt, were forced to pay annual fees so as to compensate for these losses. As a result, convenience users were being forced to make up for the losses banks were suffering by their inability to raise interest rates on revolvers. This arbitrary redistribution of wealth and income among consumers is a typical consequence of price controls.[304] The post-*Marquette* deregulation of interest rates enabled the appearance of the no-annual fee card in the last decade, resulting in a massive explosion in convenience credit card use that continues today.

This also helps to explain the stickiness of interest rates in the post-*Marquette* era. The imposition of annual fees amounted to a *de facto* increase in the interest rate so as to restore equilibrium without violating express usury limitations. Therefore, it follows that the elimination of annual fees in the 1990s should be similarly seen as a *de facto reduction* in interest rates. Thus, it is significant to observe that as the cost of funds fell throughout the 1990s, credit card issuers responded first by eliminating annual fees. This makes sense, as annual fees are disliked by consumers and because they are an extremely inefficient and roundabout mechanism for

[302] MANDELL, *supra* note 4, at xix; *id*. at 72.
[303] *Id*. at xix.

passing through increased costs to consumers. As the cost of funds continued to drop throughout the 1990s, however, then card issuers started to reduce interest rates.[305] The timing is instructive: the rapid and sustained drop in interest rates began around 1994 which follows almost exactly on the heels of the elimination of annual fees in the early 1990s. Focusing on only nominal-interest-rate stickiness ignores the reality that the proper measure of card cost and competition must include the presence or absence of annual fees as well. As Canner and Luckett observe, "[w]hen funding costs began to decline significantly after 1981, credit card rates remained mostly at their existing levels, in part because they had been constrained from rising to an equilibrium level when funding costs were climbing; the decline in funding costs tended to restore equilibrium."[306]

To the extent that suppliers cannot respond to price caps by repricing other aspects of their product (in this case annual fees), "suppliers will reduce the quantity or quality of their products or services."[307] The existence of usury laws had a pronounced negative effect on the quality of credit cards.[308] It has only been since deregulation that the market has seen the dramatic expansion in the benefits associated with credit cards, such as greater customer service, co-branding and affinity cards, and a myriad of other benefits.[309] Waiting periods for card approval were longer and rejection rates were higher.

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[304] DeMuth, *supra* note 36, at 217.
[305] *See supra* note 300 and accompanying text (noting that credit card issuers responded to drop in cost of funds rate by reducing annual fees and increasing benefits before cutting interest rates).
[306] Canner & Luckett, *supra* note 26, at 660.
[307] DeMuth, *supra* note 36, at 218.
[308] *See* DeMuth, *supra* note 36, at 218 ("Economic losses to consumers will take the form of poorer-quality regulated products and delays in obtaining them, and substitute products that are less desirable in terms of price and/or quality.").
[309] For further illustrations of the expansion of benefits, see *supra* notes 29-47 and accompanying text.

Finally, annual fees acted as a sort of "tax" on switching among credit cards, thereby dampening competition in the credit card market.[310] Annual fees discourage consumers from carrying more than one open credit card account at a time, thereby creating a delay in time while the customer seeks a new card. Because they are paid on an annual basis, they amount to an annualized capital investment. Thus, annual fees also discourage a customer from switching mid-year, which would require forgoing the return on the investment made in the old card and paying yet another annual fee on the new card.[311] By causing a substitution from interest rates to annual fees, usury limitations directly reduced consumer welfare and indirectly reduced consumer welfare by dampening competition in the market. Deregulation led to the entry of AT&T, General Motors, Discover Card, and other new firms offering no-annual fee cards into the market, shaking up the traditional power structure of the industry and increasing responsiveness to consumer demands. By increasing competition, deregulation thus also indirectly helped to bring about the expansion in card benefits previously discussed.

Thus, the rapid disintegration of annual fees following deregulation is significant for three reasons. First, it demonstrates that there was a substantial loss in consumer welfare under the pre-*Marquette* regime because consumers were willing to accept a higher interest rate in exchange for a lower or no annual fee, but were not permitted to do so. Since that time, both their words and deeds evidence a preference for no annual fees, even if that means trading off a higher interest rate.

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[310] *See supra* notes 228-60 and accompanying text (discussing the importance of low search and switch costs for changing credit cards).
[311] *See supra* notes 70-80 (discussing negative effect of annual fees in raising consumer switch costs).

Second, the appearance of annual fees as a response to usury restrictions shows the ease with which credit card issuers can evade price controls on one contractual term by altering a different contractual term. In this case, limitations on interest rates were offset by increases in annual fees. Thus it illustrates the folly of looking only at interest rates as a proxy for competition and helps to explain the stickiness of nominal interest rates following *Marquette*.

Third, by raising switch costs to consumers, the substitution of annual fees for unregulated interest rates dampened competition in the credit card market. Thus, deregulation has led to heightened competition, as the sleepy traditional leaders in the bank card market have been eclipsed by more innovative and efficient competitors. Not only did these regulations result in dead weight losses by leading to the imposition of annual fees, they also harmed consumers by arbitrarily redistributing wealth from convenience users to revolvers, limiting access to bank cards, and preventing the introduction of many ancillary benefits of card ownership.

D. Indirect Costs of Usury Regulations

But the analysis so far has considered only the direct distortions caused to the bank card market and harm to credit card users as a result of usury restrictions. But further examination reveals that the perverse effects of usury regulations has additional negative consequences for consumers that reach beyond just the bank card market. Moreover, further examination shows the myriad of ways that usury restrictions can be evaded by credit issuers. The end result will be additional deadweight loss, additional harm to consumers (especially

lower-income consumers), and a negligible restriction on the overall price of credit paid by consumers.

During the 1970s, the credit card market was dominated by large retailers such as Sears, Montgomery Ward, and J. C. Penney. Bank cards, by contrast, were a relatively small part of the credit card market when compared with today. Retailer credit cards grew out of a gradual development of consumer credit in America. The conquest of the west following the Civil War created a need for consumer credit, as many of those migrants were penniless.[312] They relied on credit extended by merchants and financial intermediaries. Consumer credit expanded following World War I, as manufacturers and retailers of more expensive household durable goods such as cars, washing machines, and vacuum cleaners allowed consumers to purchase these goods and pay for them over time, rather than requiring them to save for long periods of time before they could afford them.[313] Ackerman notes that, "[t]he first large-scale use of installment credit for consumer sales was by the Singer Sewing Machine Company, starting in 1850."[314] During the economic rebound following the Great Depression and World War II, prototype credit cards began to appear. Leading the way were cards provided by specific businesses, often aimed at traveling businessmen, such as oil company and hotel cards.[315] Airline cards followed soon thereafter. While usury restrictions remained on the books, "[a]s in times past, usury laws were widely avoided in the post-war era."[316]

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[312] MANDELL, *supra* note 4, at xii.
[313] *Id*.; Ackerman, *supra* note 142, at 95. Because these were durable goods, they had substantial value even second-hand, and thus the creditor's lien remained valuable. *Id*.
[314] *Id*.
[315] *Id*.
[316] *Id*. at 96.

Prototype department store cards began to appear as well. These were an outgrowth of the earlier practice of manufacturers extending credit to purchase household durables and the like. Retail cards were also useful for building customer loyalty and helping merchants to keep track of patterns of customer purchases. By 1914, several retailers began to issue cards to their wealthy customers, and in 1928, retailers began to issue "charga-plates," which were embossed-metal address plates, often compared to military "dog tags" in appearance. Mandell observes, "In fact, there is little, if any, difference between the way credit is used in the United States today and the way it was used in the early 1800s, with the single exception of technology."[317] Indeed, already by 1930, only 47.4% of department store sales were made for cash, 7% were made on an installment basis, and the remaining 45.6% were made on "open book" revolving credit.[318] Thus, while universal credit cards are of relatively recent vintage, the practice of making substantial household purchases on revolving credit is not.

In 1936, the Retail Service Bureau of Seattle established a rudimentary system of universal credit, as they signed up over one thousand retail establishments who agreed to honor charges by their joint customers.[319] The formation of Diners Club in 1949 laid the foundation for the development of modern bank cards. Unlike earlier cards tied to specific providers of goods and services, Diners Club was a universal card, in that many merchants honored it. It was also a third-party card, in that Diners Club extended the credit to the customer and paid the merchant, rather than the merchant issuing the credit directly. As a result, Diners Club bore the risk of nonpayment, rather than the restaurant. In return for this assured payment and the

[317] MANDELL, *supra* note 4, at 14.
[318] *Id*. at 17.

convenience to customers of being able to use Diners Club at a large number of locations, accepting merchants paid a 7% fee to Diners Club for each use.[320] Primarily aimed at businessmen, to this day Diners Club remains primarily a hotel and restaurant card.[321]

Despite the introduction of Diners Club as a universal third-party card in 1949, such cards were slow to take-off and the credit market remained dominated by department stores. Department store cards continued to dominate the market through the 1970s, but – not coincidentally – in the era following *Marquette*, general-use, universally accepted bank cards emerged to increasingly dominate the market.

The existence of usury laws helps to provide the explanation for why large retailers dominated the credit card market in the pre-*Marquette* period. The purposes of retailers in running credit card operations differed substantially from issuers such as Diners Club, American Express, and banks. The primary purpose of retail credit was to build customer loyalty and provide customer convenience.[322] As a result, retailers were willing to and usually did absorb losses in their credit operations, so long as they furthered these larger goals.[323] Retailers were primarily interested in selling goods and services, and credit operations were seen as an investment in achieving this goal. Thus, for retailers, the credit portion of the transaction was intertwined with the retail portion of the transaction. As noted earlier, this provided large

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[319] *Id*. at 18. Several New York department stores started a similar charga-plate group in 1948, issuing charga-plates that were usable at any of the cooperating stores. *Id*. at 25.
[320] *Id*. at xiii.
[321] Interestingly, this narrow focus seems to have been the source of relatively stable growth for Diners Club in recent years as a corporate card. Kate Fitzgerald, *Diners Club Gets a Push*, CREDIT CARD MGMT., Sept. 1, 1998, at 70. Because it is accepted primarily for dining and hotels, it is less prone to abuse by traveling employees than more general-use cards. *Id*. Thus, its narrow focus makes its misuse easier to monitor and prevent. *Id*.
[322] MANDELL, *supra* note 4, at xviii.

retailers with a substantial comparative advantage over smaller retailers who could not afford to establish and maintain their own credit operations. As DeMuth observes, "Consumers do not gain when one group of sellers (large national retailers) gains an advantage over another group (the smaller retailers) solely because of a superior ability to adjust to price controls."[324]

This ability to tie retail to credit sales also gave retail issuers of credit a comparative advantage over third-party issuers of credit such as banks as well. Recall that the combination of the run-up in the cost of funds in the 1970s combined with usury limitations made credit card operations for banks unprofitable during this period. Retailers such as Sears, however, were much less affected by this problem than banks. Banks were able to avoid some of the bite by altering other terms of the cardholder agreement. But retailers had an even more effective way of evading usury restrictions – they could simply bury the credit losses in the price of the goods they offered and sell the bundled product. Given that credit operations were routinely used to subsidize retail operations anyway, this cross-subsidization was a natural step.

Thus as Homer and Sylla observe, "As in ancient Athens, and in all other periods of history, there has been no limit to the charges made by loan sharks. The better class of modern loan shark skirts the law by . . . selling overpriced merchandise."[325] The result of usury restrictions, therefore, was not to prevent credit card issuers from charging high interest rates to consumers. Rather, its primary effect was to transfer wealth from issuers who had less ability to evade usury restrictions to issuers who could evade usury restrictions more easily, such as by

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[323] *Id*. at xviii; Canner & Fergus, *supra* note 4, at 2 ("The studies indicate that on average – not considering profits on associated merchandise sales – such credit card plans consistently operated at a loss.").
[324] DeMuth, *supra* note 36, at 238.
[325] HOMER & SYLLA, *supra* note 113, at 428.

burying credit losses in the price of goods.[326] As DeMuth observes, raising the price of goods to offset credit costs, "may be thought of as a particularly effective repricing method; it is apparently almost perfectly responsive, and almost impossible to control short of regulating retail prices directly."[327]

Empirical evidence supports the conclusion that retailers engaged in exactly this sort of repricing behavior in order to avoid usury restrictions.[328] The results of usury restrictions are predictable and there are a combination of responses that could be expected, ranging from credit rationing to the growth of non-regulated forms of credit. One would expect to see some degree of credit rationing and a marginal reduction in the amount of credit outstanding, especially to lower-income and higher-risk borrowers. But this will not be the only effect. One would also expect to see a substitution away from regulated forms of credit to less regulated forms of credit. Thus, there may be some reduction in the amount of credit outstanding, especially to lower-income and higher-risk borrowers, but some of this reduction will be offset by a growth in other forms of credit. The trade-off between rationing credit, and substituting less attractive forms of credit will depend on the cross-elasticity of demand among alternative forms of credit. That balance will be a function of consumer preferences and the availability of competing forms of credit. Regardless, consumer welfare loss results from both aspects. First, because some people will not get credit who otherwise would; second, because those who can still get credit will shift to other, less-attractive forms of credit.

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[326] *See* DeMuth, *supra* note 36, at 238.
[327] *Id*. at 220.
[328] *See* EVANS & SCHMALENSEE, *supra* note 7, at 28 ("To compensate for the lower profit margin on lending, issuers had to tailor other aspects of the cards to make up for the difference. Issuers in states with lower

E. Empirical Analysis of Usury Regulations and the Case for *Marquette*

Due to its severe interest rate caps, Arkansas has provided a ready case study, for several authors, to examine the impact of usury restrictions on credit markets. Empirical studies of the effect of usury restrictions in Arkansas validate the predicted effects of usury restrictions.

First, those banks that did continue to extend consumer credit to Arkansans generally tied consumer loan privileges to other bank activities, thereby making up credit losses by repricing other bank services. As one economic study concluded:

> [t]he sale of personal loans was more likely to be tied to the sale of other bank services relative to the other markets. We conclude that when income from the loan activity was restricted by regulation, Arkansas banks earned their required return on loans by tying the sale of a loan to that of a product or products that were not restricted in price.[329]

In an effort to reduce losses on consumer credit operations, banks in Arkansas also reduced the benefits offered to customers by restricting their hours of operation below banks in states with less restrictive usury ceilings. Finally, banks in Arkansas also imposed higher service charges on demand deposit accounts and checking account overdrafts.[330]

Second, interest rate ceilings also made it more difficult for Arkansas residents to get bank cards. Unable to charge a market rate of interest, card issuers predictably restricted credit card privileges to only the most credit worthy customers. Indeed, bank card issuers

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interest rate ceilings raised their credit criteria for applicants who would receive their cards, imposed fees, and used alternate methods for calculating interest charges.").

[329] A. CHARLENE SULLIVAN, EVIDENCE OF THE EFFECT OF RESTRICTIVE LOAN RATE CEILINGS ON PRICES OF CONSUMER FINANCIAL SERVICES 20 (Credit Research Ctr. Working Paper No. 36, 1980).

[330] *Id.*; *accord* PETERSON & FALLS, *supra* note 50, at 33.

canceled a number of credit card accounts during the late 1970s.[331] The result was again predictable – those unable to get access to bank cards instead made greater use of retail store cards.[332] As discussed earlier, restrictions on the extension of consumer credit also led to the proliferation of pawn shops as a substitute source of credit.[333] Thus, some have argued that usury ceilings do not even result in a reduction in the overall credit demanded by consumers, they just force consumers to shift from more-attractive to less-attractive forms of credit.[334]

Third, retailers evidenced an ability to engage in exactly the type of repricing predicted by DeMuth, as the evidence indicates that retailers in Arkansas raised prices on certain retail goods, essentially burying their credit losses in the price of the goods. Thus, goods such as major appliances (the type of goods most likely to be bought with retail credit) were estimated to cost about 3% to 8% more in Arkansas than in states with less restrictive usury ceilings.[335] At the same time, retailers also apparently reduced their services, such as charging for delivery and gift wrapping or offering fewer choices in their stores.[336]

These various repricing schemes are implausible means of increasing consumer welfare. If repricing affected consumers positively, then presumably, the schemes would exist absent interest rate controls. In fact, by encouraging credit card issuers to hide the "real" interest rate in other prices, it probably harms consumers by making it more difficult for them to determine

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[331] Canner & Fergus, *supra* note 4, at 2.
[332] *Id*. at 11.
[333] *See supra* notes 47-70 and accompanying text.
[334] *See* Richard L. Peterson, *Usury Laws and Consumer Credit: A Note*, 38 J. FIN. 1299 (1983) (concluding that low usury ceilings affect the composition of credit but not the overall level of consumer credit held by households, as usury ceilings cause borrowers to shift from cash installment credit to revolving credit or point-of-sale installment credit).
[335] Canner & Fergus, *supra* note 4, at 11.
[336] *See* PETERSON & FALLS, *supra* note 50, at 35 n.5 (citing Brenton R. Schlender, *Arkansas Retailers Say Usury Law Threatens Wholesale Closedowns*, WALL ST. J. at 1, 14 (May 22, 1981)).

the actual cost of either the goods or the credit they are receiving. One commentator has observed that, "[l]awyers and businessmen have expended a great deal of time and ingenuity devising legal methods of circumventing usury limitations."[337] Some of these mechanisms are "so complex that only mathematicians understand them."[338] Thus, although it becomes possible to equilibrate the market through these repricing schemes, the "unfortunate side effect is borrower confusion and bewilderment."[339] Furthermore, by segmenting the market on the basis of the issuers' comparative abilities to reprice the inefficiencies caused by usury restrictions, the regulations also probably further reduced consumer welfare by reducing price competition among the various suppliers of consumer credit.[340] By making it more difficult to produce a profitable card that consumers will actually want, usury limitations also tend to reduce entry of new firms, further dampening competition.[341]

Unlike bank loans or retailers, the credit card market is also a national market.[342] Thus, to the extent that it becomes more difficult to get access to credit cards, borrowers will be forced to make increased use of credit from local banks and retailers. Obviously this will have a further detrimental effect on competition for loan rates, especially in rural areas where borrowers are likely to have fewer options for consumer credit.[343]

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[337] Ackerman, *supra* note 142, at 96.
[338] *Id*. at 97.
[339] *Id*.
[340] *See* A. CHARLENE SULLIVAN, EFFECTS OF CONSUMER LOAN RATE CEILINGS ON COMPETITION BETWEEN BANKS AND FINANCE COMPANIES 20-22 (Credit Research Ctr. Working Paper No. 38, 1981); VANDENBRINK, *supra* note 253, at 30; Douglas F. Greer, *Rate Ceilings, Market Structure, and the Supply of Finance Company Personal Loans*, 29 J. FIN. 1363 (1974); *See generally* NATIONAL COMM'N ON CONSUMER FIN., CONSUMER CREDIT IN THE UNITED STATES (1972).
[341] EVANS & SCHMALENSEE, *supra* note 7, at 112.
[342] *Id*. at 68.
[343] *See* Ostas, *supra* note 296, at 831; VANDENBRINK, *supra* note 253, at 29 ("Lending institutions located in urban areas may face much greater competitive pressures than lenders in smaller cities or towns."). The

Marquette also created an ideal opportunity for an experiment of what attributes consumers desire in a credit card. After *Marquette* there were two different possible regimes that a state could implement. Because credit card terms depended on the laws of the state of issuance, banks and consumers could forum shop. Vastly different terms could be found between cards from relatively unregulated states, such as South Dakota and Delaware, and heavily regulated states such as Arkansas. The "South Dakota" regime would allow market rates of interest to be charged and with it an elimination of annual fees and an expansion of cardholder benefits. The "Arkansas" regime, by contrast, would impose a cap on interest rates combined with an annual fee, lower credit line, and fewer cardholder benefits.[344] If consumers favored the first mix of card attributes, issuers such as Citibank and MBNA who moved to *laissez faire* states such as South Dakota and Delaware would prosper. If consumers favored the latter, then Arkansas-based banks would come to dominate the credit card market.

Of course, just such a competition occurred following *Marquette* and the results are clear; consumers overwhelmingly preferred the package of options offered by unregulated states over regulated states.[345] Indeed, despite the large expansion in the use of credit card credit following *Marquette*, Arkansas-based banks actually *declined* in the amount of revolving credit

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availability of competing issuers of credit has been shown to have an effect on interest rates. Thus, it has been found that the number of finance companies within 100 square miles of a commercial bank had a negative effect on the bank's average interest charge. *See* Paul F. Smith, *Pricing Policies on Consumer Loans at Commercial Banks*, 25 J. FIN. 517 (1970) (noting that in rural areas where there is likely to be fewer issuers of credit there will also be less competition, leading to higher interest rates and other predictable results). *But see* Douglas F. Greer, *An Econometric Analysis of the Personal Loan Credit Market*, 4 TECHNICAL STUD. 37 (1974) (failing to find statistically significant evidence of competition between finance companies and commercial banks).

[344] Usury restrictions keep the interest rate on the typical Arkansas credit card at 8%, but only 10% of the applicants for the cards are approved and the credit line is often limited to $800. EVANS & SCHMALENSEE, *supra* note 7, at 59.

[345] DeMuth, *supra* note 36, at 231-36.

they issued during this period.[346] In fact, direct competition actually took place in 1991-1992, as Simmons First National Bank of Pine Bluff, Arkansas gained widespread attention for offering an 8.5% interest rate credit card, the low rate being a result of Arkansas's restrictive usury laws.[347] Simmons was featured on NBC's "Today Show," CNN, and newspaper lists of banks offering the best credit-card deals. It was reported that they were barely able to answer all the phone calls they received requesting applications. Despite this widespread publicity and interest, Simmons never became a serious player in the credit card industry, in part because they were able to accept only one out of every five applications as a result of Arkansas's tight usury laws. Given the choice, consumers have overwhelmingly preferred the package of costs and benefits offered by unregulated credit over regulated credit.[348]

The pre-*Marquette* regime probably hurt lower-income people the most. Usury caps on credit card interest rates, combined with high interest rates, generally led to some credit rationing by card issuers. The number of credit cards in circulation actually *fell* during this period, as credit card companies tried to minimize their portfolio risk to the maximum extent. In such a credit rationing regime, poorer consumers were the group most likely to be denied credit cards, whereas upper income individuals are hardly effected in their access to credit.[349] Again, this drove those poorer borrowers to pawn shops, loan sharks, rent-to-own, and point-of-sale retail credit. Given that usury restrictions uniformly injure poor individuals and provide benefits to higher-income individuals, some have suggested that the most plausible explanation for usury

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[346] *Id*. at 235.
[347] *See generally* Sinkey, Jr. & Nash, *supra* note 197.
[348] *Id*.
[349] Canner & Fergus, *supra* note 4, at 10; Daniel J. Villegas, *The Impact of Usury Ceilings on Consumer Credit*, 56 S. ECON. J. 126, 140 (1989).

restrictions is one of public choice – that their intent is not to help poor people at all, but to reduce the interest rates paid by well-to-do households in the state.[350]

Limits on the interest rates that banks could charge also led to a substitution from bank cards to retail credit.[351] Thus, not only did usury laws restrict the competition in the credit card market, it simultaneously harmed retail consumers through the limitation of choice, as determined by an individual retailer's ability to issue credit. In turn, retailers buried their credit losses in the prices of their goods, thereby increasing prices for all of their customers. Studies have shown that given the array of margins on which sellers can adjust to offset interest-rate caps, low-income buyers are most strongly opposed to an increase in the price of the goods purchased.[352] Thus, usury restriction resulted in the maximum possible negative effect on consumers. This also subsidized credit purchasers, as the cash purchasers paid higher prices, without increased benefits enjoyed by credit purchasers. In absolute terms, lower-income customers use credit less than higher-income customers. [353] In short, by denying poor people access to credit cards and forcing an increase in the cash retail price to this same group, the pre-*Marquette* regime had the unfortunate effect of forcing low-income cash purchasers to subsidize higher-income credit shoppers, effectuating a regressive redistribution..[354] As noted, this upward redistribution

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[350] William J. Boyes, *In Defense of the Downtrodden: Usury Laws?*, 39 PUBLIC CHOICE 269, 272 (1982). This strategy is probably not wholly effective. Usury ceilings will also tend to divert funds to less-regulated states, so richer households will not capture all of the benefits of usury restrictions. *See* Villegas, *supra* note 349, at 140.

[351] PETERSON & FALLS, *supra* note 50, at 35 n.6.

[352] *See Consumer Preferences*, *supra* note 66, at 77.

[353] Canner & Fergus, *supra* note 4, at 12.

[354] *Id*. ("Higher retail prices could mean that customers who usually pay in cash – including lower-income families who cannot obtain credit cards – would subsidize buyers who use credit card services."). In a discussion of this issue on the econlaw listserv, William Fischel and Howard Marvel both raised the question of why sellers did not price discriminate between cash and credit purchasers by offering two different prices. I do not have a ready explanation for this, other than to observe that empirical studies

may be the most plausible explanation for the existence of usury laws, given the harm they cause to those they ostensibly aim to protect.[355]

It is difficult to understand the economic logic of actively subsidizing credit sales relative to cash or for forcing lower-income buyers to subsidize higher-income buyers, although the political logic is manifest. Other studies found that minorities and the poor were those hurt most by similar usury restrictions in effect in Massachusetts during this era.[356] Overall, it has been observed that once all of the various adjustments are made in response to interest-rate ceilings, "substantial numbers of some consumer groups will be less satisfied with the new credit terms. It is ironic that customers who are most likely to be dissatisfied are those who are traditionally considered to be the primary beneficiaries of such legislation – those in the lower socioeconomic groups."[357]

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suggested that such price discrimination did not actually occur. One explanation may be that there was minimal benefit to retailers from offering a separate cash price, and so stood ready to accept the potential loss of cash customers. The survey by Walker and Sauter observed that for furniture and household appliance purchases in the $400-$500 range, at least 70%-90% of the purchases were made on some form of credit, usually store credit at the time of their article in 1974, with most respondents reporting figures closer to the high end of the range. *See Consumer Preferences*, *supra* note 66, at 73. Given the small number of cash purchasers and the ancillary benefits of selling on credit, such as building customer loyalty, it may have been the case that these retailers had no incentive offer multiple prices. Usury laws may conceivably have created a power monopoly by interweaving the retail and credit transactions. I have no knowledge of whether there may have been other stores during this period that specialized in cash purchases and neither Canner and Fergus' nor Walker and Sauter' study does discuss the relative availability of this option between stores. Offering two prices may have also exposed whether the seller was charging interest rates in excess of the legal minimum by providing a non-credit benchmark for comparison.

[355] *See generally* Boyes, *supra* note 350.

[356] ROBERT W. JOHNSON & A. CHARLENE SULLIVAN, RESTRICTIVE EFFECTS OF RATE CEILINGS ON CONSUMER CHOICE: THE MASSACHUSETTS EXPERIENCE (Credit Research Ctr. Working Paper No. 35, 1980).

[357] *Consumer Preferences*, *supra* note 66, at 78; *see also* Richard F. Sauter & Orville C. Walker, Jr., *Retailers Reactions to Interest Limitation Laws – Additional Evidence*, 36 J. MKTG. 58 (1972); John J. Wheatley & Guy G. Gordon, *Regulating the Price of Consumer Credit*, 35 J. MKTG. 21 (1971).

F. Benefits of *Marquette* and the Deregulation of Credit Card Interest Rates

After *Marquette*, success in the credit card market became a question of who could provide the best product to consumers at the lowest cost, rather than rewarding those with a comparative advantage in hiding and repricing their interest rate losses in other terms and products. By uncoupling the credit transaction from the goods transaction, *Marquette* made possible the tremendous entry of bank and other issuers into the credit card market, with consumers as the beneficiaries.

This further suggests that by making the credit market more efficient, *Marquette* would reduce the cost of credit and thereby lead to an expansion in the credit card market. Much of this expansion would be predicted to come not from an increase in overall consumer debt burdens, but from a substitution from other forms of credit whose competition had been benefited by *Marquette*, such as secured lenders, pawnbrokers, and large retailers who granted credit. Thus, for instance, during the 1970s when Arkansas had a very restrictive usury rate of 10%, Arkansans were able to acquire less consumer credit in the form of mortgages and direct credit, but acquired far more retail credit due to the ability of retailers to hide high credit charges by raising the price of their goods.[358] Repeal of usury regulations on credit cards alone should not have led to a substantial increase in consumer debt overall, but merely a substitution from other forms of debt to credit card debt. Beyond these efficiency savings, however, *Marquette* can explain little of the increase in consumer debt in recent years. Rather, it is evident that the primary factor driving this transition is consumer demand for bank cards, due to their convenience, ancillary benefits, or their relative attractiveness as a source of credit. In short,

there has been an exogenous outward shift in consumer demand for bank cards at the same time that the industry was effectively deregulated.[359]

Thus, to the extent that *Marquette* even mattered in an era of falling cost of funds and interest rates, it is difficult to argue that consumers were hurt by the Supreme Court's decision in *Marquette*. Deregulation of interest rates rationalized the market for credit cards and spurred competition. As one commentator sums up the case against ceilings on interest rates:

> The prevalence of avoidance [of interest rate ceilings] does not mean that all businessmen are vampiric usurers. Avoidance exists because educated lawmakers, judges, and businessmen discover that it is frequently beneficial. In most cases, it is better to permit credit to flow at high rates than to dry it up by enforcing a restrictive and irrational usury ceiling. But there is a cost in avoidance. It encourages violation of at least the spirit of the laws and lead courts into esoteric or spurious distinctions. The businessman worries that a court may declare his avoidance technique illegal. Finally, evasion is not selective; it permits lenders to take advantage of unsophisticated borrowers just as much as it permits arms length negotiators to secure beneficial credit. Avoidance may be better than the application of some laws, but it clearly less desirable than a rational law of interest rates.[360]

Given the distorting effects of usury limitations on the credit market and the negative effect it had on consumers (especially low-income consumers), it is difficult to imagine that many bankruptcy commentators pine for the passing of usury limitations.

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[358] PETERSON & FALLS, *supra* note 50, at 34.
[359] This exogenous demand increase may further help to explain the stability in interest rates following *Marquette*, as decreasing supply costs due to reductions in the cost of funds may have been offset by an expansion in consumer demand for credit cards. *See* DeMuth, *supra* note 36, at 229-30.
[360] Ackerman, *supra* note 142, at 98-99.

VI. Some Tentative Bankruptcy Implications of the Economics of Credit Cards

The full implications of the foregoing for the relationship between credit cards and bankruptcy are explored in a companion article to this one.[361] Nonetheless, the setting of this symposium presents an opportunity to briefly highlight some of the obvious and direct implications in a summary fashion. As the foregoing has indicated, most of the questions raised about credit cards are irrelevant to bankruptcy. In fact, linking the study of credit card and bankruptcy may undermine a sensitive analysis of both fields.

The bankruptcy community is obsessed with the volume of direct mail sent by credit card companies. It is now understood that direct mail represents an effort to educate consumers and reduce switch costs, and that the primary effect of direct mail has been to redistribute existing card holders among different issuers. The limited bankruptcy implications that result from a proper understanding of direct mail, therefore, should be obvious.[362] In the saturated market of the past decade, direct mail has not been used to find new, "uncreditworthy" customers. Rather, it is aimed at already existing credit card customers to try to induce them to switch to a new card issuer. Moreover, the effect of all of this competition has been to increase consumer knowledge about credit card terms and thereby to reduce interest rates and increase benefits. In every other industry, advertising increases competition. The credit card industry is no exception. The question of the volume of direct mail sent by the

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[361] *See* TODD J. ZYWICKI, CREDIT CARDS AND BANKRUPTCY (George Mason Univ. Sch. of Law Working Paper, Aug. 28, 1999).

[362] It may be relevant in a way that is different from the conventional argument. Stuart Feldstein has argued that the problem with credit cards is excessive numbers of cards and excessive credit lines that provide individuals with a ready means of abuse prior to filing bankruptcy. *See* Feldstein, *Hearings*, *supra* note 186. This argument is more plausible than the standard argument, and may have some merit to it. I address it more fully in the companion article to this one. *See* ZYWICKI, CREDIT CARDS, *supra* note 361.

credit card industry therefore, would seem to be largely irrelevant to the question of bankruptcy. To the extent it is relevant, increased competition in the credit card industry has driven down interest rates and other price terms, which should be reducing the bankruptcy filing rate. The fetish in much of the bankruptcy community about the volume of direct mail sent by the credit card industry thus seems to be largely misplaced.

Many commentators have claimed that the rise in bankruptcies and credit card defaults in recent years can be attributed to conscious decisions by credit card issuers to expand output in response to their extraordinary profits.[363] By contrast, empirical studies as well as common sense reject the proposition. I am aware of only two studies that have attempted to test the proposition that increasing bankruptcies and credit card defaults in recent years have been driven by greater extension of credit to higher-risk borrowers, and both have rejected the hypothesis.[364] The first study, by economists Donald P. Morgan and Ian Toll observes, "If lenders have become more willing to gamble on credit card loans than on other consumer loans credit card charge-offs should be rising at a faster rate [than non-credit card consumer loans] . . . . Contrary to the supply-side story, charge-offs on other consumer loans have risen at virtually

[363] *See* Warren, *Bankruptcy Crisis*, *supra* note 181, at 1083 ("When the cards are highly profitable, credit card issuers have a strong incentive to distribute them to marginal borrowers and to borrowers already loaded with debts, which increases both the issuer's profits and its loan defaults."); Susan L. DeJarnatt, *Once is Not Enough: Preserving Consumers' Rights to Bankruptcy Protection*, 74 IND. L.J. 455, 499 (1999) ("In large part, the credit industry, which has chosen to increase profits by extending credit in large amounts to people with weak credit histories, wants to be saved from itself. Increased bankruptcy filings are part of the cost of these trends in lending."); Bernard R. Trujillo, *The Wisconsin Exemption Clause Debate of 1846: An Historical Perspective on the Regulation of Debt*, 1998 WISC. L. REV. 747, 749 (1998) ("One likely reason for the explosion in consumer bankruptcies is the explosion in the extension of credit by lenders to 'subprime' borrowers; that is, people who low income, youth, prior credit history or other factors make it more likely that they would default on the loan. The number of subprime loans (mainly in the form of credit cards issued to high-risk borrowers) increased as lenders realized that charging higher interest rates created a handsome profit even after writing off the loans that went bad."). All of these commentators simply posit the causal link without providing actual empirical support.

the same rate as credit card charge-offs."[365] This "suggest[s] that some other force is driving up bad debt."

The second study, by David B. Gross and Nicholas S. Souleles, concludes that changes in the risk-composition of credit card loan portfolios "explain only a small part of the change in default rates [on credit card loans] between 1995 and 1997."[366] Thus, the only two studies of which I am aware either *reject* the hypothesis that the growth in default rates has been caused by a conscious decision to extend credit to less credit-worthy borrowers, or conclude that it accounts for very little of the surge in filings. The explanation lies elsewhere.

Further, the credit card market was effectively deregulated in 1978 and the purported boom era of credit card profits followed soon thereafter. By contrast, profits have moderated in the 1990s. Due to expanding consumer demand and technological advances, the great growth in adding new credit card users was also during the 1980s; thus, the credit card market has been largely saturated for some fifteen years. Thus, it is striking that from 1980 to 1984 – the era of deregulation and growth in new credit card ownership – charge-offs on credit card loans actually *fell*.[367] It is difficult to understand how the "high profits lead to increased risk" theory can explain a *fall* in delinquencies for the years immediately following deregulation, yet somehow also explain the rise in bankruptcies and delinquencies some twenty years later.

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[364] In addition, there has been a study of credit cards and bankruptcy in Canada. *See* Ellis, *supra* note 184. While interesting to Canadian policy makers, this would seem to have little relevance for Americans.
[365] Donald P. Morgan & Ian Toll, *Bad Debt Rising*, CURRENT ISSUES IN ECON. AND FIN., March 1997, at 1, 4. Morgan and Toll conclude that increased consumer demand for credit cards, relative to other forms of consumer credit is driving the increase in credit card debt, not a supply-side shift. *Id*.
[366] *See* DAVID B. GROSS & NICHOLAS S. SOULELES, EXPLAINING THE INCREASE IN BANKRUPTCY AND DELINQUENCY: STIGMA VERSUS RISK-COMPOSITION 16 (The Wharton Sch., Univ. of Pennsylvania, Working Paper, Aug. 21, 1998). Gross and Souleles argue that increased credit card defaults are primarily the result of decreased stigma associated with filing bankruptcy. *Id*. at 1-2.

The failure to link increased defaults to increased profitability also casts doubt on some of the criticisms that have been leveled at congressional efforts to reform the consumer bankruptcy laws. For instance, Ausubel has argued that tightening consumer bankruptcy laws will reduce charge-offs for credit card issuers, thereby further increasing their profits. In turn, he argues, this will lead them to extend further credit to even more marginal borrowers, ironically leading to a further increase in bankruptcies.[368] This thesis is incorrect for several reasons, but space permits a discussion of only three problems here. First, Ausubel's flawed understanding of the nature of competition in the credit card market leads him to conclude erroneously that reductions in bankruptcy losses will primarily be reflected in increased profits for credit card issuers. Actually, much of those savings will be passed onto consumers through increased benefits and decreased price terms. Second, this thesis rests on Ausubel's suspect notion that the correlation between credit card defaults and bankruptcy somehow implies that increased credit card use causes increased bankruptcy filings, and the related mistaken notion that increases in total consumer indebtedness cause increased bankruptcy filings. Third, this ignores the empirical findings discussed above, namely that increased bankruptcy filings do not appear to be the result of increased credit extension to more marginal borrowers. Instead, consumers have increased credit card use as a substitute for other forms of credit, and increased bankruptcy filings appear to be caused primarily by a change in the economic incentives associated with filing bankruptcy along with a reduction in the personal shame and social stigma

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[367] *See* Morgan & Toll, *supra* note 365, at 2 tbl. 1; *see also* Canner & Fergus, *supra* note 4, at 2 (noting that elinquencies on credit card loans "fell to a historically low level in early 1984").

[368] *See* Ausubel, *Credit Card Defaults*, *supra* note 79, at 264 ("Any time the annual return on assets increases by one percent, the profit-maximizing issuer should be willing to tolerate a one percent increase in

associated with filing bankruptcy.[369] Thus, Ausubel seems to be flatly incorrect about the likely effects of bankruptcy reform. Bankruptcy reform will reduce the economic benefits associated with filing bankruptcy, especially for high-income debtors, and will reinstate some of the social stigma associated with filing bankruptcy.[370] The primary result of reform, therefore, will be to reduce bankruptcy filings, reduce the losses imposed on creditors from bankruptcy filings, and reduce the costs of credit and goods and services for consumers who pay their bills.[371]

It has also been observed that the rate of consumer bankruptcies is "astonishingly highly correlated with the rise in credit card defaults."[372] It is not clear what, if anything, this purported correlation is supposed to mean. Some certainly have suggested that widespread credit card use is somehow causing an increase in bankruptcies.[373] But while this is one possible conclusion to draw from this correlation, there are several other conclusions that could be drawn. One is the well-established warning that, standing alone, correlation says nothing about causation. Causation can be inferred from correlation only if there is a plausible theory that links the two.[374] In this case, the most plausible causal link almost certainly runs in the opposite direction from that suggested. Filing bankruptcy is a default event. It is probably more plausible that

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the annual probability that its marginal customer will default. Thus, an increase in the profitability of issuing credit cards should be expected to lead to an increase in actual defaults and actual bankruptcies.").

[369] *See* Jones & Zywicki, *supra* note 1, at 180.

[370] *See* TODD J. ZYWICKI, BANKRUPTCY AND RECIPROCITY (George Mason Univ. Sch. of Law Working Paper, Aug. 1, 1999).

[371] *See* Jones & Zywicki, *supra* note 1, at 222.

[372] Ausubel, *Credit Card Defaults*, *supra* note 79, at 250.

[373] This seems to be the thrust of Professor Warren's analysis on this point. *See* Warren, *Bankruptcy Crisis*, *supra* note 181, at 1083.

[374] Commentators have made similar errors in other aspects of bankruptcy policy, such as in the belief that a purported correlation between debt-to-income ratios and the bankruptcy filing rate could somehow prove a causal explanation for rising consumer bankruptcies, without taking into account such issues as current debt burden, interest rates, and growth in assets. *See* Jones & Zywicki, *supra* note 1, at 222. Indeed, it is far from clear that such a correlation even exists in the first place, given its inconsistency with recent trends as well as in the post-recession years of 1992-1994. *Id*.

bankruptcy causes default, not the other way around. One suspects that almost exactly the same correlation exists between home mortgage defaults, home equity loan defaults, and automobile loan defaults.[375] In every one of these situations, it is almost certainly the case that defaults on these loans are highly correlated with bankruptcies, because bankruptcy is a default event. In addition, data on credit card defaults and bankruptcy filing rates cannot rule out alternative explanations, such as debtors "loading up" their credit cards on the eve of bankruptcy or that debtors strategically choose to default on credit card loans before defaulting on their mortgages and other secured loans. Credit card loans are unsecured and due to their small size and the difficulties of collecting, a debtor often never needs to fear a collection action, nor need he fear losing valuable collateral. As a result, strategic borrowers almost certainly would default on their credit card obligations before defaulting on a mortgage, home equity loan, or car loan that would cause them to lose the underlying collateral. The data also fails to capture strategic use of credit cards as a mechanism for increasing equity in homes or cars prior to filing bankruptcy or for using credit cards to pay off nondischargeable debt.[376]

Finally, the credit card economics raises questions about the proper approach of courts to the nondischargeability of credit card debts under section 523(a)(2) of the Code. Some courts have gone so far as to suggest that credit card issuers can prove reasonable reliance for dischargeability only if the card issuer performs a full-scale credit check, as with a typical

[375] I have seen no empirical evidence on these issues.

[376] For instance, student loan debt usually is nondischargeable. As a result, parents have an incentive to minimize student loan debt while maximizing their use of credit cards and other forms of unsecured and dischargeable while their children are in college. Following college the parents can then file bankruptcy and discharge those debts. *See* Peter Pae & Stephanie Stoughton, *Personal Bankruptcy Filings Hit Record;*

unsecured consumer bank loans (pawn shops, of course, do not).[377] The foregoing has suggested the error in this approach. Credit cards already suffer unusually high administrative expenses – requiring full-scale credit checks would further escalate these costs. Perhaps more fundamentally, to the extent that consumers are forced to bear these costs, it would dampen the competitive process that has generated the consumer-friendly innovations of recent years, by raising the costs of acquiring and keeping cards. As this article has shown, credit cards are a unique combination of a transactional and credit device, with special dynamics. The attempt to reconcile the revolutionary new instrument of credit cards with the old common law terms of 523(a)(2) threatens to disfigure *both* the credit card market and the law of nondischargeability . Understanding the economics of credit cards is necessary for creating a sensible jurisprudence in the law of nondischargeability.

VII. Conclusion

A full discussion of the relationship between credit cards and bankruptcy awaits another day. The primary purpose of this article has been to clarify the underlying economics of credit cards and credit card use. Credit card issuers have provided a convenient whipping-boy for apologists for the current runaway bankruptcy system. This article has demonstrated that the conventional wisdom in the bankruptcy community about the economics of credit cards is incorrect. Allegations of "high profits" rest on a misunderstanding of the nature of profit

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Easy Credit Blamed, Congress May Act, WASH. POST, June 7, 1998, at A1 (describing bankruptcy filer who incurred large credit card debts to pay for children's college educations).

[377] *See* At&T Universal Card Servs. v. Ellingsworth (*In re* Ellingsworth), 212 B.R. 326 (Bankr. W.D. Mo. 1997); AT & T Universal Card Servs. v. Chinchilla (*In re* Chinchilla), 202 B.R. 1010 (Bankr. S.D. Fla. 1996).

measurements for credit card operations, by ignoring the higher risk associated with credit card loans, and by looking only at an arbitrarily short time period for assessing credit card profitability. Allegations of "sticky" interest rates ignore the nature of consumer credit generally and the cost structure of credit card operations. Allegations that credit card interest rates are "high" fail to provide a reference point for asking the question, "High compared to what?"

The role of the *Marquette* decision and the deregulation of credit card operations has been widely misunderstood. Deregulation increased consumer demand for credit card markets by making credit markets more efficient and allowed lower-income borrowers to shift away from reliance on pawn shops and loan sharks. At the same time, technological changes and changes in shopping habits also increased consumer demand for credit cards. The growth of bank cards also spurred entrepreneurship and small business development by decoupling credit transactions from retail transactions. Thus, it is almost certainly the growth in consumer demand for credit cards and a shift away from other forms of credit that explains the growth in credit card use since *Marquette*.

A necessary condition for placing the blame on credit card issuers for the recent boom in personal bankruptcies is demonstrating that there is some permanent defect in the operation of the credit card market that enables the persistence of profits. If the credit card market is competitive then there is no reason to single it out for special concern, as opposed to the numerous other consumer credit markets, from pawn shops, to personal loans, to mortgages, to home equity loans. If the credit card market is competitive, then regulation of the market will presumptively do more harm than good, and spiraling bankruptcy losses can be expected to be

passed on to all consumers in the form of higher interest rates increases in other price terms, and the loss of valued card benefits.

This article has demonstrated that the credit card market is almost certainly competitive. It also has rebutted other sources of alleged profits, such as consumer irrationality unique to credit cards. Both consumers and issuers have responded rationally to a powerful financial innovation. Consumer demand, not issuers' collective market power, drives the competitive process. Credit cards are used as both a transaction and credit device. Focusing myopically on only the purported link between credit cards and bankruptcy, would-be reformers have ignored the transactional purposes of credit cards. Focusing instead on interest rates, they have also ignored the multiple cost and benefit margins on which the credit card contract may be adjusted. Given the apparent absence of persistent profits and consumer irrationality, the burden now clearly rests on critics of the credit card industry to demonstrate how profits could persist in an industry with over six thousand atomistic competitors, low barriers to entry, and strong evidence of rational consumer choice. To date, the critics' efforts have come up short.