Modernizing Consumer Protection in the Financial Regulatory System: Strengthening Credit Card Protections

TESTIMONY OF
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Professor Zywicki clerked for Judge Jerry E. Smith of the U.S. Court of Appeals for the Fifth Circuit and worked as an associate at Alston & Bird in Atlanta, Georgia, where he practiced bankruptcy and commercial law. He received his J.D. from the University of Virginia, where he was executive editor of the Virginia Tax Review and John M. Olin Scholar in Law and Economics. Professor Zywicki also received an M.A. in Economics from Clemson University and an A.B. cum Laude with high honors in his major from Dartmouth College.

Professor Zywicki is the author of more than 70 articles in leading law reviews and peer-reviewed economics journals. He is one of the Top 50 Most Downloaded Law Authors at the Social Science Research Network, both All Time and during the Past 12 Months. He served as the Editor of the Supreme Court Economic Review from 2001-02. He is a frequent commentator on legal issues in the print and broadcast media, including the Wall Street Journal, New York Times, Nightline, The Newshour with Jim Lehrer, CNN, CNBC, Bloomberg News, BBC, The Diane Rehm Show, and The Laura Ingraham Show. He is a contributor to the popular legal weblog The Volokh Conspiracy. He is currently the Chair of the Academic Advisory Council for the following organizations: The Bill of Rights Institute, the film “We the People in IMAX,” and the McCormick-Tribune Foundation’s “Freedom Museum” in Chicago, Illinois. He was elected an Alumni Trustee of the Dartmouth College Board of Trustees.
It is my pleasure to testify today on the subject of “Modernizing Consumer Protection in the Financial Regulatory System: Strengthening Credit Card Protections.” The growth in the consumer use of credit cards over the past three decades has transformed the American economy, placing in consumers’ hands one of the most powerful financial innovations since the dawn of money itself. Credit cards have transformed the ways in which we shop, travel, and live. They have enabled the rise of the E-Commerce economy, delivering goods and services to consumers’ doorsteps and permitting consumers to shop when and where they like, unconstrained by traditional limits on competition and consumer choice. They have enabled consumers to travel the world without the inconvenience of travelers’ checks. And they have transformed the way in which we live, from such small improvements such as relieving us the inconvenience of checks and frequent visits to ATM machines to large improvements such as providing security against crime. Credit cards can be used as a transactional medium, a source of credit, or even as a short-term source of cash. Credit cards provide consumers with additional benefits, from cash back on purchases, frequent flier miles, car rental insurance, dispute resolution services with merchants, and 24 hour customer service. It has been aptly observed that that with a credit card you can buy a car; without a credit card you can’t even rent one. Many of these benefits, of course, have been most salient for lower-income, young, and other similar populations, and unsurprisingly, growth in credit card use has been rapid among those populations.

But the myriad uses of credit cards and the increasing heterogeneity of credit card owners has spawned increasing complexity in credit card terms and concerns about confusion that may reduce consumer welfare. American consumers encounter
complexity every day in the goods and services they purchase, such as cars, computers, and medical services, just to name a few. And the complexity of credit card terms is modest when compared to that of the Internal Revenue Code, as are the penalties (financial and otherwise) for failure to understand its terms. The relevant issue for regulation, therefore, is whether the complexity is warranted in light of the benefits.

In considering whether further legislation or regulation of credit card terms or disclosures is appropriate, two questions should be considered. First, what is the problem to be corrected through regulation? And second, will the benefits of the regulation justify the costs, including the unintended consequences of the regulation?

This is not to imply that certain credit card issuers or practices are not or may not seem unfair or improper. But there are ample tools for courts and regulators to attack deceptive and fraudulent practices on a case-by-case basis when they arise. Unlike case-by-case common law adjudication, however, legislation or regulation addresses itself to categorical rulemaking, thus before categorical intervention is warranted it is necessary to examine whether categorical problems have arisen.

I have taught and written extensively on questions related to credit cards, consumer credit generally, and the relationship between consumer credit and consumer bankruptcies. Several years ago I published *The Economics of Credit Cards*, 3 CHAPMAN L. REV. 79 (2000).¹ I have also published *An Economic Analysis of the Consumer Bankruptcy Crisis*, 99 NORTHWESTERN L. REV. 1463 (2005,² as well as *Institutions, Incentives, and Consumer Bankruptcy Reform*, 62 WASHINGTON & LEE L. REV. 1071

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I am currently working on a book on consumer credit and consumer bankruptcy tentatively titled *Bankruptcy Law and Policy in the Twenty-First Century* to be published by the Yale University Press, from which portions of this testimony are drawn. I am honored to have the opportunity to share my research with you here today. From 2003-2004 I served as Director of the Office of Policy Planning of the Federal Trade Commission.

**What is the problem to be corrected through regulation?**

Advocates of greater regulation have alleged three problems that are purported to justify additional regulation of the credit card market: (1) Consumer overindebtedness caused by access to credit cards, (2) Unjustifiably “high” interest rates on credit cards, and (3) A growing use of so-called “hidden” fees. Reviewing the empirical evidence available on these issues, however, there is no sound evidence that any of them present a meaningful problem for which substantially greater regulation is appropriate.

**(1) Consumer Overindebtedness**

The expressions of concern heard today about credit cards were presaged in similar paternalistic comments about the spread of installment credit. Installment selling was criticized for allegedly inducing overconsumption by American shoppers, especially supposedly vulnerable groups such as “the poor, the immigrant, and the allegedly math-impaired female.” Rapacious installment sellers were accused of extending credit to unworthy borrowers, leading them to purchase unnecessary products and generating

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4 Calder, supra note Error! Bookmark not defined., at 211.
5 Calder, supra note Error! Bookmark not defined., at 166.
debts beyond their means to repay. In 1873 the *New York Times* expressed concern that Americans were “Running in Debt” and by 1877 warned that Americans were “Borrowing Trouble.” In 1873 a labor leader bemoaned the improvidence of America’s consumers, “Has not the middle class its poverty? Very few among them are saving money. Many of them are in debt; and all they can earn for years, is, in many cases, mortgaged to pay such debt.” An 1899 report concluded that installment selling “lured thousands to ruin’ encouraging people to buy what they could not pay for and making debt ‘the curse of countless families.’” And not merely the poor and improvident were lured into ruin, but upstanding middle class families as well, as they engaged in a heated rivalry of conspicuous consumption with their neighbors. In 1949 *Business Week* asked, “Is the Country Swamped with Debt?” and by 1959 *U.S. News and World Report* worried that “Never Have So Many Owed So Much.” In 1940 *Harper’s* even feared that “Debt Threatens Democracy.”

The criticisms of mid-century installment credit mirrored those of credit cards today: easy access to installment credit allegedly generated overconsumption, overindebtedness, and finally bankruptcy. Credit customers bought more goods than

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6 See CALDER, supra note Error! Bookmark not defined., at 182.
7 CALDER, supra note Error! Bookmark not defined., at 217.
8 Quoted in DAVID S. EVANS AND RICHARD SCHMALENSEE, PAYING WITH PLASTIC: THE DIGITAL REVOLUTION IN BUYING AND BORROWING 101 (2d ed. 2005).
9 CALDER, supra note Error! Bookmark not defined., at 59 (quoting Ira Steward).
10 CALDER, supra note Error! Bookmark not defined., at 213.
11 CALDER, supra note Error! Bookmark not defined., at 215. The term “conspicuous consumption” was coined over a century ago. See THORSTEIN VEBLEN, THE THEORY OF THE LEISURE CLASS: AN ECONOMIC STUDY OF INSTITUTIONS (1899). Veblen argues that one effect of conspicuous consumption is a tendency for households to reduce savings and to rely on debt to live beyond their means.
12 Quoted in EVANS & SCHMALENSEE, supra note 8, at 101.
cash customers and retailers were criticized for enabling shoppers to buy more on credit than they normally would on cash. Installment selling was considered a “menace” that trapped Americans in “a morass of debt” and was the “first step toward national bankruptcy,” a further overture to today’s criticisms of credit cards. Moreover, although most Americans believed that installment selling was a “good idea” in general and were confident in their own ability to use it responsibly, three out of four also thought that their neighbors used installment credit excessively—a judgment mirrored in modern surveys of consumers about credit card use, in which most consumers assert confidence in their own ability to use credit cards responsibly but express concern about the ability of others to do the same. And as consumer bankruptcy filings rose during the 1960s, some commentators and politicians pointed the finger of blame at profligate installment lending. These criticisms of installment credit provide ironic reading today in light of the modern claim that the ubiquity of credit cards—which have come to displace installment credit for many consumer transactions—allegedly has produced a psychology of consumer overconsumption.

There is no doubt that consumer use of credit cards has increased over time, as has credit card debt. But available evidence reveals that this increase in credit card debt has not in fact resulted in an increased financial distress for American households.

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13 CALDER, supra note Error! Bookmark not defined., at 200.
14 CALDER, supra note Error! Bookmark not defined., at 220; compare MANN, supra note.
15 CALDER, supra note Error! Bookmark not defined., at 221. The use of debt to purchase consumption goods such as food was thought to be especially irresponsible. CALDER, supra note Error! Bookmark not defined., at 225.
16 CALDER, supra note Error! Bookmark not defined., at 235.
Instead, this increased use of credit cards has been a substitution from other types of consumer credit to an increased use of credit cards.\textsuperscript{20} For instance, when consumers in earlier generations purchased furniture, new appliances, or consumer goods, they typically purchased those items “on time” by opening an installment loan and repaying the loan in monthly payments or through a layaway plan. A consumer who needed unrestricted funds to pay for a vacation or finance a car repair would typically get a loan from a personal finance company or a pawn shop. Today, many of these purchases and short-term loans would be financed by a credit card, which provides ready access to a line of credit when needed, without being required to provide a purchase-money security interest, dealing with the up-front expense and delay of a personal finance loan, or pawning goods.\textsuperscript{21} Credit cards are far more flexible and typically less-expensive than these alternative forms of consumer credit, thereby explaining their rapid growth in consumer popularity over time. Federal Reserve economist Tom Durkin observes that credit cards “have largely replaced the installment-purchase plans that were important to the sales volume at many retail stores in earlier decades,” especially for the purchase of appliances, furniture, and other durable goods.\textsuperscript{22} Former Federal Reserve Chairman Alan Greenspan similarly observed, “[T]he rise in credit card debt in the latter half of the 1990s is mirrored by a fall in unsecured personal loans.”\textsuperscript{23}

\textsuperscript{20} See Zywicki, Bankruptcy Law and Policy, Chapter 3.
\textsuperscript{21} Wal-Mart recently announced, for instance, that it was terminating its once-popular layaway program. Like other major department stores, Wal-Mart acknowledged that this form of credit had become irrelevant because of widespread access to credit cards. Unlike layaway, purchasing goods using a credit card permits the consumer to use the goods while paying them off, whereas under layaway the store keeps the goods until they are paid for.
In fact, the evidence suggests that the growth in credit cards as a source of consumer credit is explained almost completely by this substitution effect. Thus, even as credit card use has risen rapidly over time, it does not appear that this has contributed to any increase in consumer financial distress.\(^{24}\)

Since 1980, the Federal Reserve has calculated on a quarterly basis the “debt service ratio,” which measures the proportion of a household’s income dedicated each month to payment of its debts. Consider the following chart (data through 3\(^{rd}\) Quarter 2007):\(^{25}\)

As this figure illustrates, the overall debt service ratio for non-mortgage debt (consumer revolving plus nonrevolving debt) has fluctuated in a fairly narrow band


\(^{25}\)Unless otherwise indicated, all data presented herein is drawn from the Federal Reserve Board.
during the period 1980 to 2006 (the small scaling distorts the overall impression). In fact, the non-mortgage debt service ratio was actually slightly higher at the beginning of the data series in 1980 (0.0633) than at the end in the first quarter of 2006 (0.0616) with local peaks and troughs throughout.

Further isolating non-mortgage consumer debt into revolving and nonrevolving components illustrates the substitution effect:

As can be readily observed, from 1980 there has been a gradual downward trend in the debt service burden of nonrevolving installment credit, such as car loans, retail store credit (such as for appliances or other consumer goods) and unsecured loans from personal finance companies, that mirrors the upward trend for the credit card debt service burden over this same period, leaving the overall consumer credit debt service ratio unchanged. Moreover, according to the Survey of Consumer Finances, the percentage of
households in financial distress (as measured by a total debt service ratio, including mortgage credit, of greater than 40%) has fluctuated within a narrow band since 1989.26

Decomposing just the consumer credit portion of household indebtedness reveals the substitution effect, exhibiting the rise in credit card credit in the 1980s to be offset by a near mirror-image of the fall in the installment debt burden during that same time:

![Consumer Non-Mortgage Debt Service Ratio: 1980-2007](image)

This substitution effect of credit card for other types of consumer credit has been most pronounced for lower-income debtors, primarily because this group historically has faced the most limited credit options; thus, credit cards are likely to seem especially attractive to them. As a report of the Chicago Federal Reserve Bank concluded, “The 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.”  

As with the overall population, the percentage of lowest-quintile households in financial distress has been largely constant since 1989, and in fact, the percentage of lowest-income households in financial distress is actually at its lowest level since 1989.

In fact, it is likely that this data actually tends to overestimate the contribution of revolving debt to the debt service ratio, because of peculiarities in the way in which the debt service ratio is measured. First, there has been a dramatic increase in household wealth holdings over the past decade or so, first because of the roaring stock market of the late-1990s, and then the rapid appreciation in housing values into the 2000s. Because consumers rationally borrow against and consume some percentage their accumulated wealth, during periods of rapidly increasing household wealth (such as during the 1990s) consumers would be expected to increase their consumption and consumer debt in order to liquidate some of this accumulated wealth. The ratio of consumer credit to household net worth has been about 3.5% of household assets for about the past forty years, thus as consumer wealth rises consumers will tend to increase their debt holdings even though their measured income does not increase.

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27 Wendy M. Edelberg & Jonas D. M. Fisher, Household Debt, Chi. Fed. Letter, Nov. 1997, at 1, 3 (1997); see also id. at 4 (“[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 between 1989 and 1995 as a result of increased use of mortgages, credit cards, and automobile leasing); Glenn B. Canner & James T. Fergus, The Economic Effects of Proposed Ceilings on Credit Card Interest Rates, 73 Fed. Res. Bull. 1, 4 (1987) (noting that 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”).

28 See Thomas A. Durkin, Comment, in The Impact of Public Policy on Consumer Credit 36, 40 (Thomas A. Durkin and Michael E. Staten eds., 2002). Data in chart provided by Durkin.
Second, the data used here to measure revolving credit likely tends to overestimate the true amount of revolving credit because of a rise in transactional use over time, an overestimation that tends to grow over time. Revolving credit is measured by the credit card balance *outstanding* at the end of a given month, regardless of whether it is actually revolved or paid off at the end of the billing cycle. As a result, the data also report as part of outstanding revolving credit balances on transactional accounts that will be paid at the close of the billing cycle, but happen to be outstanding at the time of reporting. Because some of this transactional debt is still outstanding at the end of the month, it is recorded as an outstanding debt balance and thus an increase in transactional credit card use will artificially increase the measured amount of revolving credit and overstate revolving credit as a percentage of income.

Transactional or “convenience” use of credit cards as a purchasing rather credit medium has been rising over time, both in terms of number of credit card transactions as well as dollar values. During the past 15 years, convenience use grew by approximately 15% per year, whereas the amount borrowed on credit cards as revolving credit grew
only about 6 ½% per year. In part, the increase in transactional use of credit cards has been driven by the spread of rewards cards, such as cash-back programs or frequent flyer miles.

The mismeasurement of transactional credit card use as credit card borrowing tends to overstate credit card debt by approximately ten percent, a figure that has doubled in the past decade as a result of the rapid rise of credit card convenience use. The percentage of credit card transactions that are paid off at the end of each month relative to those that end up revolving has risen over time, indicating a growth in convenience use. In addition, the median monthly charge amount for convenience users has risen over four times more rapidly for convenience users than for revolvers. The median monthly charge for convenience users has increased by about $130 (from $233 in 1991 to $363 in 2001), whereas the average charge of revolvers is substantially smaller and has increased more slowly, rising only $30 during that same time period (from $117 to $147). Again, much of this growth in the median size of transactional purchases probably results from a rise in cash-back and cobranding benefits. In addition, because convenience users do not have to pay for their purchases until the end of the billing period plus the grace period after receiving their bill, they have the opportunity to take advantage of interest rate “float” during the time between their purchase and payment of the obligation, which may be as long as 45-60 days. During that period, a transactional user essentially receives a free loan from the credit card issuer at zero percent interest during which time those same funds can be invested in assets that generate a positive return, even if only a money

30 See Johnson, Convenience or Necessity?
31 Technically the interest rate is slightly negative because of the time value of money.
market account or similar safe, short-term investment. In fact, empirical evidence tends to suggest that consumers do exactly this—convenience users tend to carry smaller precautionary balances in their checking accounts than revolvers, suggesting that they are taking advantage of this float. In addition, revolvers are more likely to make use of debit cards than are nonrevolvers, which can be explained by the fact that revolvers do not receive the benefit of interest-rate float because they are required to pay the full interest on the account.\textsuperscript{32}

The substitution effect is seen even among those who file bankruptcy. Consider the following data drawn from Sullivan, et al.:

\begin{figure}
\centering
\includegraphics[width=\textwidth]{Debt_of_Bankruptcy_Filers}
\caption{Debt of Bankruptcy Filers}
\end{figure}

As can be seen, from 1981 to 1997 the average amount of total debt held by bankruptcy filers remained constant, but the ratio of credit card debt to total unsecured

debt increased, suggesting a substitution between credit card debt and other unsecured debt. Sullivan, et al., find that in 1981, total debt for bankruptcy filers was $68,154, of which unsecured debt was $27,365.\textsuperscript{33} By 1997, mean total debt among bankruptcy filers had actually fallen slightly to $61,320 and unsecured debt rose slightly to $29,529. Although total debt and total unsecured debt remained relatively constant, mean credit card debt among bankruptcy filers rose from $3,635 to $14,260 during this period and median credit card debt rose from $2,649 to $9,345.\textsuperscript{34} Thus, the substitution effect is evident among bankruptcy filers specifically, as credit card debt has risen even as total debt and total unsecured debt have remained largely constant. Credit card debt nonetheless remains a small fraction of overall household debt for bankruptcy filers.

Overall, therefore, there is no evidence that increased use of credit cards has caused consumers as a whole to become overindebted. In fact, the rise in credit card use is the result of a substitution away from other less-attractive forms of credit (because of cost, flexibility, or other drawbacks such as the need to pawn personal goods) to credit cards.

(2) “High” Credit Card Interest Rates

\textsuperscript{33} See SULLIVAN, ET AL., FRAGILE, supra note Error! Bookmark not defined., at 66, Table 2.4. All values are in 1997 dollars.
\textsuperscript{34} Id. at 122, Table 4.1. The 1981 figures include only bank-type cards whereas the 1997 figures include all credit card debt. As noted, during this period there was a general substitution from other types of credit cards to bank-type cards, thus the 1981 figures may underestimate total credit card debt. In 1991, the mean debt for bank-type cards only among bankruptcy filers was $11,529, thus using the same category as 1981 there was plainly a large increase in bank-type card debt during the 1980s.
Many commentators insist that the growth in credit card use as a source of revolving credit is irrational in light of the “high” interest rates charged on credit cards.\textsuperscript{35} But credit card interest rates have fallen substantially over the past fifteen years:

![Credit Card Interest Rates, 1991-2006](image-url)

Annual fees, which were once a standard component of credit card contracts, virtually disappeared from credit cards during this period, except for those cards that offer frequent flier miles or some other benefit program that requires some administrative activity.\textsuperscript{36} This elimination of annual fees, which were in the range of $20-$50 per year, was a massive across-the-board price reduction that not only reduced the cost of credit cards to consumers, but also increased competition in the credit card market by making it

\textsuperscript{35} Note that if the interest rates really were higher on credit cards than on the types of credit that they supplant, then one would expect this to be reflected in a higher debt-service ratio, which as we have just seen, it is not.

\textsuperscript{36} GAO REPORT at 23. The GAO Report noted that some cards offered rewards but still did not charge annual fees.
easier and less-expensive for consumers to carry multiple cards and to use the cheapest or most appropriate card for any given transaction.

This rapid decline in credit card interest rates explains the substitution from other types of consumer credit. Compare credit cards to the closest alternative to credit card borrowing, the traditional short-term unsecured installment loan, such as from a personal finance company. The following Figure displays interest rates on 24-month unsecured installment loans versus credit card interest rates for the past thirty years:

As can be readily observed, the difference between interest rates on short-term personal installment loans and credit card accounts has narrowed over time. Indeed, in recent years the interest rate on credit card accounts has frequently fallen below that of short-term personal loans. A recent survey of consumer banking rates in the Washington, D.C., area found the prevailing interest rate on credit cards was 8.16%, whereas the
prevailing rate for personal loans was 10.45%. Moreover, once up-front initiation fees on personal loans are taken into consideration the overall cost of personal loans is almost certainly higher overall. And this doesn’t even consider the time, inconvenience, and more limited usefulness of a personal finance loan, or the more flexible repayment option of credit cards. According to one survey conducted by the Federal Reserve, 73% of consumers report that the option to revolve balances on their credit cards makes it “easier” to manage their finances versus only 10% who said this made it “more difficult.”

This decline in credit card interest rates has resulted from robust competition in the credit card market and savvy shopping by consumers. Survey evidence indicates that consumers who revolve credit card balances are extremely likely to be aware of the interest rate on their credit cards and to comparison shop among cards on that basis, and those who carry larger balances are even more likely to be aware of and comparison shop on this term than those who revolve smaller balances. By contrast, those who do not revolve balances tend to focus on other aspects of credit card contracts, such as whether there is an annual fee, the grace period for payment, or benefits such as frequent flier miles. In fact, consistent with the observation of more aggressive interest rate shopping

37 The Washington Times reports area consumer banking rates each Friday. Data is drawn from those published reports.
38 Brito and Hartley reported, for instance, “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.” 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.” 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.” By contrast, credit cards generally require no application fee and no minimum loan size. See Dagobert L. Brito & Peter R. Hartley, Consumer Rationality and Credit Cards, 103 J. POL. ECON. 400, 402 (1995).
39 Durkin, Credit Cards: Use and Consumer Attitudes at 623.
by revolvers, those who revolve balances are charged lower interest rates on average than those who do not.\textsuperscript{41}

Empirical evidence indicates that credit card interest rates also generally reflect changes in the riskiness of credit card lending. Thus, when credit card chargeoffs increase, the spread charged between the underlying cost of funds and the interest rate rises.\textsuperscript{42}

Furthermore, credit card interest rates have become less “sticky” over time, indicating that technological and risk-scoring innovations as well as more flexible risk-based pricing (as detailed below) has made credit cards even more responsive to competitive pressures. According to the General Accounting Office 93\% of the cards they examined in 2005 had variable interest rates—a rise of 9 percentage points in just two years.\textsuperscript{43} As a result, interest rates on credit cards have become more closely tied to overall interest rates in the economy, as illustrated in the following Figure.

\begin{figure}
\centering
\includegraphics[width=\textwidth]{figure.png}
\caption{Credit Card Interest Rates over Time}
\end{figure}

\textsuperscript{43} GENERAL ACCOUNTING OFFICE, CREDIT CARDS: INCREASED COMPLEXITY IN RATES AND FEES HEIGHTENS NEED FOR MORE EFFECTIVE DISCLOSURES TO CONSUMERS 15 (Sept. 2006).
As can be seen, interest rates on credit cards historically were relatively “sticky,” when compared to other types of interest. But note in particular 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. During the period 1972-1982, the federal funds rate rose from a monthly low of 3.29% in February 1972 to a high of 19.10% in June 1981. Annual averages ranged from 4.43% in 1972, steadily increasing to 16.38% in 1982, before they started falling again. Thus, 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 period of 20 years the interest rate on credit cards has remained relatively constant, until the decline in interest rates in recent years. If credit card issuers were reaping large profits off the

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44 An extended discussion of the explanation for the traditional stickiness of credit card interest rates is provided in Todd J. Zywicki, *The Economics of Credit Cards*, 3 CHAPMAN L. REV. 79 (2000).
“spread” between the cost of funds and interest rates in the 1980s, they by definition were suffering equally large losses during the 1970s and the early 1980s. In fact, during this period, the average return on credit card operations was lower than for other sectors of banking activity. So, in general, whether the cost of funds rate has been rising or falling, interest rates on credit cards have been much less responsive to changes in the cost of funds than have other forms of consumer credit.

In recent years, however, credit card interest rates became much more responsive to changes in the cost of funds rate during this period. Beginning with the final quarter of 1994 to the present, the interest rates on credit cards became tied much more closely to the cost of funds rate rose, and for credit card accounts actually assessed interest, the fit is even tighter, again likely reflecting the higher emphasis placed on this term by revolvers when shopping for cards.45

On the whole, therefore, there appears to be no evidence of any market failure with respect to interest rates on credit cards. Competition and increasingly sophisticated consumer choice have brought about lower and more responsive interest rates over time. Alternative types of consumer credit offer similar interest rates, but often higher fees and more inconvenience than do credit cards.

(3) Fees and Other Price Terms

Interest rates on credit cards have fallen and become more flexible during the past decade, but during that same time period late fees, overdraft fees, and other fees have

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45 See Kathleen Johnson, recent Developments in the Credit Card Market and the Financial Obligations Ratio, FED. RES. BULLETIN 473, 477 (Autumn 2005) (noting that correlation between credit card interest rates and the prime rate was only 0.09 during the 1980s and early 1990s but has risen to 0.90 from mid-1990s to present).
risen in frequency and amount. These fees remain only a relatively small percentage of issuers’ revenues, however, only amounting to about 10% of issuers’ revenues, whereas interest payments still amount to about 70% of revenues.46 The remainder of revenue is generated by merchant discount fees and the like. Moreover, although the GAO was able to find some isolated instances where assessment of these fees imposed an undue hardship on particular consumers, it was unable to find any systematic evidence of categorical abuse or misuse of these fees.

This increased use of penalty fees arose during the same time period that credit card interest rates both became lower and more flexible. This does not appear to be a coincidence. Evidence indicates that, in general, these fees are risk-based fees triggered by actual borrowing behavior and when used in combination with interest rates provides issuers with greater flexibility in pricing credit terms than relying on interest rates alone. Interest rates are generally an \textit{ex ante} before the fact estimate of a given borrower’s likelihood of default. Late fees, over-limit fees, and other similar fees, by contrast, are more tightly tied to the borrower’s exhibited risky behavior. The only systematic empirical study of these fees of which I am aware concludes that these fees are risk-based and complement interest rates for efficient risk pricing.47 Massoud, Saunders, and Scholnick find, for example, that a one standard deviation in bankruptcy per capita leads to an increase in penalty fees of $0.62 to $1.31. Similarly, a one standard deviation change in the chargeoff ratio was found to change late fees in a range of $4.35 to $7.57. In addition, they find that a 1 basis point reduction in card interest rates will result in an increase in penalty fees of between 0.88 and 4.11 cents. Thus, in their study, a one

\begin{footnotesize}
46 GAO REPORT at 70-72.
47 See Nadia Massoud, Anthony Saunders, and Barry Scholnick, \textit{The Cost of Being Late: The Case of Credit Card Penalty Fees}, working paper (January 2006).
\end{footnotesize}
standard deviation in credit card interest rates (273 basis points) was estimated to change late fees by $2.40. Moreover, they found no evidence that assessed penalties were larger for low-income borrowers.

The increased use of risk-based fees has occurred at the same time as increased variable-rate pricing on credit cards, as the combination of these two pricing mechanisms is evidently more efficient than interest rates alone. In addition, it appears that consumers who pay these fees are not surprised by their existence, but are aware of them before they enter into the transaction that triggers the fee.48

In addition, if credit card penalty fees were actually some sort of new form of consumer abuse, rather than simply a more accurate pricing scheme, then this tradeoff between higher risk-based fees and lower interest rates would result in larger economic rents or “economic profits” to the banking industry. In fact, return on assets has been largely constant for credit card banks over the past two decades, even though there has been a steady rise in the returns of other commercial banks.49 Thus, during the early days of credit cards, issuers relied heavily on annual fees that were assessed on all cardholders, regardless of risk. During the 1990s, issuers phased out widely-disliked annual fees and moved toward greater emphasis on interest rates that were more closely tied to borrower risk. The gradual increase in the use of risk-based fees to supplement interest rates has made credit pricing reflect risk still further. This suggests that the transition to more risk-based pricing has come about through market competition, resulting in more efficient pricing of credit terms to consumers. First, there was a general phasing out of annual fees

48 See Durkin, Credit Card Disclosures at p. A114.
49 See GAO REPORT at 76. For a discussion of the special difficulties in inferring credit card “profits” from the standard analysis of “return on assets” used in the banking industry, see Zywicki, The Economics of Credit Cards.
and greater emphasis on interest rates, then recent years has seen a gradual increase in the use of penalty fees to further more closely tailor price to cardholder risk.

**Cost-Benefit Analysis and Unintended Consequences**

Available evidence indicates that the credit card market is competitive and responsive to consumer choice. Understanding the economics of the credit card market therefore raises serious challenges for any proposals to heighten regulation of the credit card market. In fact, misguided regulation can have serious unintended consequences that will end up reducing consumer welfare; thus, any proposal for additional regulation should be studied carefully to ensure that the benefits of any such regulation exceed the costs, including any unintended consequences that such regulation is likely to spawn. In addition, it would be wise to examine the continuing relevance and utility of existing regulations before proposing new regulations.

There are three basic manners in which credit can be regulated: substantive regulation, disclosure regulation, or market and common law “regulation.” Each has costs and benefits.

**Substantive Regulation**

The oldest and hoariest type of regulation of consumer credit is substantive regulation of credit terms, such as usury restrictions that cap the rate that can be charged on interest rates. Substantive regulation of terms is generally frowned upon today, as thousands of years of economic history has generally demonstrated that the costs of substantive regulation generally exceed any benefits that it would generate.
In particular, there are three predictable unintended consequences that result from substantive regulation of consumer credit terms: (1) term substitution and repricing, (2) product substitution, and (3) rationing. Each of these three would likely manifest themselves in response to efforts to place new regulations on credit cards.

(1) **Term Substitution and repricing:** Credit card contracts are complicated, multiple-term contracts. Term substitution refers to the phenomenon that regulation of some terms of this multiple-term contract will cause issuers to adjust other terms in order to reach the market clearing “price.” Even in the relatively short history of credit cards, history is littered with examples. Prior to the Supreme Court’s decision in *Marquette National Bank v. First of Omaha Corp.*, 439 U.S. 299 (1978), most consumer credit card contracts were governed by usury restrictions that capped the interest rate that could be charged on credit cards. As interest rates generally rose during the 1970s, this rate ceiling meant that card issuers could not charge a market rate of interest on their consumer loans. The era witnessed a number of offsetting term repricing adjustments by credit card issuers, all of which almost certainly made consumers worse off. First, issuers imposed annual fees on all cards to make up for the shortfall from the inability to charge a market rate of interest. Not only was this an inefficient pricing mechanism because it wasn’t calibrated to borrower risk, it also forced transactional users of credit cards to subsidize revolvers who were able to borrow at the sub-market interest rate. Similarly, retailers would bury their credit losses by marking up the price of the goods they sold on credit; for instance, states with stricter usury ceilings also had higher retail prices for appliances. Usury restrictions also had a number of other unfortunate negative impacts

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50 *See* Zywicki, *Economics of Credit Cards* for an extended discussion.
on consumers. Customer benefits were lower in states with stricter usury ceilings, such as shorter banking hours and the elimination of other services such as free Christmas gift wrapping at department stores. Moreover, this term substitution also had the effect of making credit more heterogeneous in nature, making it more difficult and expensive for consumers to compare prices and shop. Most notably, annual fees made it more expensive for cardholders to carry more than one card, thereby making it difficult to switch from one card to another that presented a better deal.

The immediate aftermath of Marquette was the opportunity for credit card issuers to charge a market rate of interest for their products. In turn, this led to the rapid elimination of annual fees, which were no longer necessary to offset regulatory caps on interest rates. In turn, this enabled greater competition and consumer choice, which eventually resulted in a fall in a proliferation of card variety, lower interest rates, and heightened competition. According to a study by Thomas Durkin of the Federal Reserve, 90% of consumers report that they are “Very” or “Somewhat Satisfied” with their credit cards. Given the ease of comparison shopping and the wide variety of cards in the marketplace, it should not be surprising that most consumers have found products and issuers with which they are largely satisfied.

Empirical evidence strongly suggests that efforts to place substantive limits on credit card pricing today would likely generate similar offsetting term substitution. As noted, empirical evidence indicates that penalty fees imposed by credit card issuers are generally tied to consumer risk and as a result have an offsetting effect on interest rates. Any regulatory efforts to cap or otherwise regulate late fees, overlimit fees, and the like,

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51 Thomas Durkin, *Consumers and Credit Disclosures: Credit Cards and Credit Insurance*, FEDERAL RESERVE BULLETIN (April 2002).
would therefore almost certainly lead to increased interest rates for all consumers, or other offsetting adjustments in credit contract terms. It is not readily apparent why regulators would seek to impose a regulatory scheme that forces responsible and less-risky borrowers to pay higher interest rates to subsidize irresponsible and risky borrowers who pay their bills late or exceed their credit limits. This cross-subsidization is especially unfair to low-income but responsible borrowers who would otherwise be lumped into the same interest rate category as these other borrowers. In fact, the GAO Report indicates that at least one credit card issuer is experimenting with a credit card that would eliminate all penalty fees—but in exchange would impose a much higher interest rate (above 30 percent) if the cardholder pays late or otherwise defaults on the terms of the card.\textsuperscript{52} Thus, while there appears to be some isolated instances of penalty fees run amuck, blanket regulatory limitations on these fees will likely make credit card pricing less efficient and harm overall consumer welfare.

\textbf{(2) Product Substitution:} Notwithstanding the ability of credit card issuers to readjust uncontrolled terms of the credit card contract to try to price credit efficiently, in some situations the inability to charge efficient risk-based prices will make it impossible to extend credit card credit to some borrowers. Nonetheless, Americans need access to credit to deal with life’s surprises, such as the need for unexpected car repairs, medical bills, to furnish a new apartment, or simply for a student to buy an interviewing suit to seek a job. If these individuals are unable to get access to credit cards, experience and empirical evidence indicates that they will turn elsewhere for credit, such as pawn shops,

\textsuperscript{52} GAO REPORT at 24.
payday lenders, rent-to-own, or even loan sharks.\textsuperscript{53} As noted above, there is no evidence that more widespread access to credit cards has worsened household financial condition because this growth in credit has been a substitution from other types of consumer credit.

It is hard to see how a college student or any young American is made better off by being denied a credit card and thus forced to furnish her apartment through a rent-to-own company. Nor is it readily apparent to me how a lower-income family who needs schoolbooks or a clarinet for their child is made better off by being forced to borrow from a payday lender or pawn shop to make ends meet. The young and the poor already have fewer and less-attractive credit options than middle class families—restricting their credit options still further by making it even more difficult for them to get access to attractive credit on competitive terms does not seem to be a plausible way of making their lives better.

(3) \textbf{Rationing:} Finally, if issuers are unable to reprice terms so as to reach a market-clearing price for all consumers, and those consumers are unable to get needed credit from pawn shops, loan sharks, and other less-attractive lenders, the eventual result will be that some Americans will lack access to much-needed credit. This is the well-established finding of thousands of years of economic history, going back at least to Ancient Greece. What of the person who needs access to credit to repair a broken

transmission so that he can get to work? In the end, at least some consumers are going to be forced to survive without credit that will allow them to repair their car, buy braces for their children, or Christmas presents for their relatives. Simply wishing that he could have access to credit on terms favored by regulators will not make it so and it is not clear what policy benefit is gained by pretending otherwise.

**Disclosure Regulation**

The drawbacks of substantive regulation of consumer credit terms are well-understood. As a result, it has become increasingly common to mandate certain disclosures, rather than to impose substantive regulations on consumer credit. Evidence suggests that some disclosures, like the requirement of disclosing the APR for credit card loans, has tended to facilitate consumer awareness of competing credit offers and thus to shop for the best deal available.\(^5^4\)

But as with substantive regulation, there is a trade-off to increased mandatory disclosures. Consumers have limited attention for reading disclosures and issuers have limited space and expense for making disclosures. Thus, mandating some disclosures necessarily makes it more difficult to disclose fully other card terms that some consumers may care more about or may make it more difficult for consumers to find the information that they care about.

For instance, approximately half of American consumers do not revolve a balance on their credit cards. For those consumers, the APR is a completely irrelevant term in shopping for and using a card. And the evidence suggest that in fact transactional users of credit cards pay much less attention to the APR and Finance Charge than do those who

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\(^5^4\) See Durkin, *Credit Card Disclosures.*
revolve balances (and the larger the balance the more attention is paid).\textsuperscript{55} Transactors generally care more about other aspects of cards, such as grace periods, benefits (such as car rental insurance or purchase price protection), and any rewards they offer (such as frequent flier miles or cash back). Although requiring disclosure of information of interest rates is certainly useful for those who shop on that basis for the other half of card users who do not revolve balances it is simply unnecessary clutter that makes it more difficult for them to locate the information that they want from a card issuer.

Moreover, experience demonstrates that once disclosures are mandated, they become very difficult to update in light of changing circumstances. This can be a particular problem in rapidly-evolving markets such as the credit card market. For instance, the “Schumer Box” requires disclosure of useless or trivial information such as the amount of the minimum finance charge, which according to the GAO Report, was typically about 50 cents. Other mandatory disclosures, such as the method for computing balances, may be too complicated or of little importance to most consumers in choosing among cards.\textsuperscript{56} The GAO Report observes that the outdated structure of the Schumer Box, TILA, and Regulation Z make it difficult to accurately and effectively disclose many of the new terms on credit cards that have been described, rendering such disclosures less helpful than would otherwise be the case.

Nonetheless, trivial, outdated, or irrelevant disclosures are given the same importance as other more important terms, and newly important terms are difficult to disclose at all. For mandatory disclosures to be an effective tool for facilitating consumer choice, rather than a counterproductive distraction and threat of information overload,

\textsuperscript{55} Durkin, \textit{Credit Card Disclosures} at p. A 113.
\textsuperscript{56} GAO REPORT at 54.
regulators must be committed to updating them swiftly and regularly in order to keep up with rapid changes in the market and consumer preferences.

Still another problem with the actual practice of disclosure regulation is the apparent effort to use disclosure regulation as a “back door” version of substantive regulation, to try to guide consumers in the “right” direction. Thus, although it is recognized that usury restrictions are counterproductive, it is implicitly assumed that forcing disclosure of the “high” rate of interest will shock consumers into moderating their credit use, along the lines of “If consumers only knew how much they were paying in interest, they would borrow less.” A related problem is mandating disclosures in order to advance some political or social goal, rather than to facilitate careful and responsible consumer borrowing. Thus, Congress recently mandated the disclosure of the amount of time it would take to pay off a cardholders existing balance assuming that only the minimum payment were made. Federal Reserve economist Thomas Durkin estimates that this disclosure actually will be useful to only 4% of cardholders who state that they actually intend to stop adding new charges to the card and to repay their balance by making only the minimum payment.57 Although this disclosure effects a very small number of consumers—who could otherwise get the same information simply by calling their credit card issuers—it will necessitate still further expense by cardholders and further increase the costs to consumers of locating the information that they actually care about. Properly implemented, standardized disclosure may facilitate autonomous consumer choice by making it easier for consumers to comparison shop among credit products. But efforts to use disclosure as a back door version of substantive regulation is

likely to be ineffective at bringing about the desired substantive outcome, while simultaneously failing to provide the useful information to consumers that disclosure regulation should produce.

Finally, according to another study by Durkin, two-thirds of credit card owners find it “very easy” or “somewhat easy” to find out information about their credit card terms, and only six percent believed that obtaining this information was “very difficult.” Two-thirds of respondents also reported that credit card companies usually provide enough information to enable them to use credit cards wisely and 73% stated that the option to revolve balances on their credit card made it “easier” to manage their finances versus only 10% who said this made it “more difficult.” Finally, 90% of credit card owners were “Very” or “Somewhat Satisfied” with their credit cards, versus only 5% who were “Somewhat Dissatisfied” and only 1% percent—that’s 1 out of 100—who were “Very Dissatisfied.”

In short, consumers seem overwhelmingly satisfied with their credit cards, the information they receive from credit card issuers, and ease with which they can get information about their cards. Credit card issuers appear to have the incentives to provide timely and accurate information to consumers and by all accounts appear to be doing so.

**Market Competition and Common Law as Regulation**

It must also be kept in mind that market competition is a form of regulation as well. The credit card market is extremely competitive, with thousands of issuers constantly competing to woo consumers with better offers. Consumers routinely carry as
many as four credit cards in their wallets, ready to switch immediately to the card that
offers a more attractive package of benefits and terms. In such a market, it is unlikely
that oppressive or unfriendly contract terms would last, and in fact this seems to be the
case. The GAO Report found, for instance, that only 3 of the 28 cards that they examined
had “universal default” clauses in 2005.\textsuperscript{58} The GAO Report also found that between
2003 and 2005 only a minority of credit card issuers used the so-called “double-cycle
billing method” of calculating finance charges and I understand that even those issuers
have eliminated that scheme today.\textsuperscript{59} In addition, only 2\% of cards charge annual fees,
and virtually all of them provide some rewards program in return. In fact, annual fees
traditionally have been the cost of credit cards most despised by consumers—in fact,
when annual fees were first implemented in the 1970s, consumers cancelled 8\% of their
credit cards immediately.\textsuperscript{60}

In addition, courts have used traditional common law rules and contract remedies
to punish fraudulent or deceptive practices by card issuers. This has been quite
efficacious in protecting consumers and raises further questions about the need for
additional regulation.

Thus, although issuers may try to impose on consumers a variety of disagreeable
terms, the ease with which consumers can shift from one card to another, and the heated
competition among issuers for consumer loyalty, renders such a scenario relatively
implausible. Whether annual fees, universal default clauses, or “double-cycle billing,”
the market appears to be largely self-correcting in terms of delivering to consumers the

\textsuperscript{58} GAO REPORT at 26.
\textsuperscript{59} GAO REPORT at 28.
\textsuperscript{60} See Zywicki, Economics of Credit Cards.
credit card products that they desire—which explains the 90 percent positive satisfaction rate described above.

**Behavioral Economics and the Modern Case for Regulation**

Some commentators nonetheless have argued that this substitution by consumers to greater reliance on credit cards is evidence of widespread consumer irrationality rather than a beneficent process of market competition. But these arguments ignore the very possibility of a substitution effect, implicitly assuming that all debt has been piled upon preexisting consumer debt burdens. It also is implicitly assumed that there must have been an increase in debt burdens, both because of an increase in indebtedness as well as a belief that credit cards impose higher interest rates than the types of credit that they replaced.

It is also asserted that credit cards are uniquely prone to consumer irrationality and overspending. But this argument usually is not based on a comparison to the alternative types of consumer credit that they replaced, such as installment or “open book” store credit or even retail store credit cards, which were widely-owned in the 1970s and which were subject to identical criticisms in earlier generations. Some scholars argue that credit cards are more prone to biases of “hyperbolic discounting” than installment credit. But why would a consumer be more prone to hyperbolic discounting bias when a purchase is made on a credit card with the full balance to appear on the statement and become due in full the next month as opposed to an installment loan where

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the full price of the loan is concealed in monthly payments that may stretch out over many months or even years, especially when the price of credit is obscured in the price of the goods? As noted at the outset, earlier generations criticized installment credit on precisely this basis. White focuses on the fact that the payments under installment loans are regularized, but the issue of hyperbolic discounting is salient at the time the loan is made, not when it is repaid. Student loans, for instance, are installment loans but it would be difficult to argue that students anticipate the full cost of those loans more rationally than for credit cards. Moreover, unlike many installment loans, credit card loans can be easily refinanced for a better interest rate by switch balances to lower-rate cards.

As noted, complaints about the perceived irrationality or short-sightedness of “other consumers” is as ubiquitous as credit itself, whether the product was installment loans in mid-Twentieth Century America or credit cards today. Consumers today surely are at least as sophisticated at using and shopping for credit as in the past and the ubiquity of credit advertising has made informed shopping easier than ever. In fact, consumer behavior involving credit cards appears to be generally consistent with rational economic behavior. Revolvers are more aware of their interest rates and more likely to comparison

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63 For instance, consumers are often unable to understand the full cost of traditional installment loans such as the APR and related terms. See JAMES M. LACKO & JANIS K. PAPPALARDO, FED. TRADE COMM’N., IMPROVING CONSUMER MORTGAGE DISCLOSURES: AN EMPIRICAL ASSESSMENT OF CURRENT AND PROTOTYPE DISCLOSURE FORMS 35 (2007); Jinkook Lee and Jeanne M. Hogarth, The Price of Money: Consumers’ Understanding of APRs and Contract Interest Rates, 18 J. PUB. POL’Y AND MARKETING 66 (1999); Diane Hellwig, Comment, Exposing the Loansharks in Sheep’s Clothing: Why Re-Regulating the Consumer Credit Market Makes Economic Sense, 80 NOTRE DAME L. REV. 1567, 1591-92 (2005) (summarizing studies).

64 Federal Reserve Economist Kathleen Johnson notes, for instance, that over the past decade credit card users have become less myopic in terms of their household financial planning. See Johnson, Transactions Demand, supra note Error! Bookmark not defined., at 13-15. Moreover, as noted, increased competition among payday lenders tends to decrease the price of these loans, suggesting some degree of shopping behavior even among those borrowers. See supra note Error! Bookmark not defined., and accompanying text. In a hyper-competitive environment such as the credit card environment, shopping is even easier for consumers.
shop among cards on that basis than others, and those who carry larger balances are even
more likely to be aware of their interest rate and comparison shop on this term than those
who revolve smaller balances. Revolvers are more likely than convenience users to
read credit card solicitation material, and a larger proportion of revolvers said that they
would apply for a card with a lower rate if it were offered, and the larger the outstanding
balance the more likely the cardholder would be apply for a lower-rate card. Revolvers
are more likely to hold a credit card with an annual fee but a lower interest rate than are
transactional users. In fact, as illustrated above in Figure 9 and as others have found,
this competition is so intense that credit card pricing today actually illustrates an
inversion of interest rates—revolvers actually tend to have interest rates that are lower on
average than nonrevolvers. According to the Survey of Consumer Finances the median
interest rate on the household credit card with the largest balance was 11.5 percent in
2004, a drop of 3.5% from 2001. Consumers also have become increasingly savvy
about exploiting “teaser rate” offers by “card surfing” from one teaser rate card to the
other. Those who do not revolve balances, by contrast, tend to focus on other terms of

65 See Thomas A. Durkin, Credit Card Disclosures, Solicitations, and Privacy Notices: Survey Results of
Consumer Knowledge and Behavior, FEDERAL RESERVE BULLETIN p. A 109, 112-A115 (2006) (80% of
revolvers examine APR frequently compared to 40% of transactors); Zywicki, Economics of Credit Cards,
supra note Error! Bookmark not defined., at 104-09; Randall J. Pozdena, Solving the Mystery of High
66 Durkin, supra note 65, at A117; Glenn B. Canner & Charles A. Luckett, Developments in the Pricing of
Credit Card Services, 78 FED. RES. BULL. 652, 663 (1992); Paul Calem & Loretta Mester, Consumer
Behavior and the Stickiness of Credit card Interest Rates, 85 FED. RES. BULLETIN 333 (1988); see also
Darryl E. Getter, Consumer Credit Risk and Pricing, 40 J. CONSUMER AFFAIRS 41, 57-60 (2006); Sha
Yang, Livia Markoczy, & Min Qi, Unrealistic Optimism in Consumer Credit Card Adoption, 28 J. ECON.
PSYCH. 170, 177 (2007).
67 See Brown & Plache, supra note Error! Bookmark not defined., at 79-80.
68 Brown & Plache, supra note Error! Bookmark not defined.; Howard Beales & Lacey L. Plache,
Rationality, Revolving, and Rewards: An Analysis of Revolving Behavior on New Credit Cards, Working
69 Daryl E. Getter, The Credit Card Market: Recent Trends, Funding Cost Issues, and Repricing Practices,
CRS REPORT FOR CONGRESS 2-3 (Feb. 27, 2008).
70 See Zywicki, Economics of Credit Cards, supra note Error! Bookmark not defined., at 107-08.
credit card contracts, such as the grace period for payment, benefits such as frequent flier miles, and whether there is an annual fee, just as standard economic theory would predict.\footnote{Durkin, supra note 65, at A112; Canner & Luckett, supra note 66.}

There also is no evidence that borrowers systematically underestimate their likelihood of credit card borrowing or the cost of it.\footnote{Canner & Luckett, supra note 66, at 665; Cargill & Wendel, supra note Error! Bookmark not defined.} Most consumers choose the credit card plan that is most suitable for their needs and those who do not tend to learn fairly rapidly from their mistakes and switch to a more appropriate card, with those who made the biggest mistakes being the ones most likely to switch.\footnote{See Brown & Plache, supra note Error! Bookmark not defined.; Sumit Agarwal, Souphala Chomsisengphet, Chunlin Liu, & Nicholas S. Souleles, Do Consumers Choose the Right Credit Contracts?, Fed. Res. Bank of Chicago Working Paper WP 2006-22 (Oct. 23, 2006); Sumit Agarwal, John C. Driscoll, Xavier Gabaix, & David Laibson, Stimulus and Response: The Path from Naivete to Sophistication in the Credit Card Market, Working Paper (Aug. 20, 2006). This “learning” phenomenon has been observed with other consumer contracts as well. See Eugenio Miravete & Ignacio Palacios-Huerta, Rational Attention in a Repeated Decision Problem, Working Paper (Sept. 2004).} In fact, with respect to credit cards empirical research indicates that where consumers err, they do so by overestimating their likelihood of revolving rather than underestimating.\footnote{Agarwal, et al., find that consumers rarely erred in choosing the no-annual fee, higher interest rate cards, correctly predicting that they would not revolve. Instead, they disproportionately erred in choosing the high-fee, low-interest rate card, and then failing to revolve enough debt to justify the payment of the annual fee. Agarwal, et al., Do Consumers Choose, supra note 73, at 8-12. One study that purports to find an “unrealistic optimism” bias in credit card borrowing did not try to determine whether there is also unrealistic pessimism or the relative frequency of optimism and pessimism bias. See Yang, et al., supra note 66.} Consumers are less likely to revolve on higher-APR credit cards and are more likely to revolve where they pay an annual fee in exchange for a lower interest rate.\footnote{Beales & Plache, supra note 68.} Those who pay no annual fee are the least likely to revolve balances, indicating that consumers are not stockpiling credit cards on which they are later induced to resolve balances.\footnote{Beales & Plache, supra note 68.} When a consumer obtains a new credit card, the primary predictor of whether she will revolve on that card is whether she
revolved on the old card, suggesting that getting a new credit card does fundamentally change consumer behavior or “seduce” consumers into revolving. Moreover, a cardholder becomes less likely to revolve balances the longer they hold their card. In addition, consumers who hold rewards cards are less likely to revolve than those who do not, thereby suggesting that the promise of these rewards does not induce a borrower to short-sightedly “overconsume” and thereby unconsciously pile up debt.