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# Do Consumers Really Want Credit Card Reform?

By Kathryn L. Combs and Stacey L. Schreft

Earlier this year, several bills were introduced in Congress to curb what many consumer advocates have described as abusive credit card practices. These bills were intended to keep credit card issuers from penalizing consumers for paying their card balances in full each month. In unveiling one of the measures, Congressman John LaFalce declared, “[Consumers] should not be tricked or trapped into escalating interest rates and unnecessary fees. And they clearly deserve better than to be punished for paying off debt and for responsibly using their credit cards.”

Apparently, many consumers agree. According to a November 1996 survey by *Money* magazine, 79 percent of respondents supported legislation to restrict how credit card issuers set fees and account terms.

With such strong consumer support for credit card reform, it is not surprising that Congress responded. In fact, Congress has repeatedly considered similar measures, some even more

restrictive, such as proposals to cap the interest rate charged on credit card accounts. These measures have in common one potentially disturbing feature: if passed into law, they each would impose price controls on credit card accounts.

This article addresses whether such legislative efforts can achieve the stated objective of benefiting consumers. Section I reviews many past and pending efforts to reform credit card pricing. The effects of such price controls depend on the many price terms and product features that determine a credit card’s true cost to consumers, and on industry characteristics that determine how card issuers set account terms. Consequently, section II describes the price of a credit card, while section III considers the structure of the card industry and its implications for issuers’ pricing practices. Sections IV and V analyze the economic effects of setting a ceiling on one or more components of price. The conclusion is that consumers as a whole generally do not benefit from reform measures of the type studied. The effective price of a credit card account might not fall for many—or any—consumers as a result of a pricing restriction, and credit availability is likely to be reduced, at least to some consumers. Supporting evidence from the U.S. economy’s most recent experience with binding

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*Kathryn L. Combs is an associate professor in the Graduate School of Business at the University of St. Thomas in St. Paul, Minnesota. Stacey L. Schreft is a senior economist at the Federal Reserve Bank of Kansas City. This article is on the bank’s Website at [www.kc.frb.org](http://www.kc.frb.org).*

price ceilings on consumer credit is presented in section VI. The article concludes in section VII that consumers should think twice before asking for pricing restrictions on credit cards.

## I. THE REVOLVING DOOR OF CREDIT CARD REFORM

The desire for reform of credit card pricing appears to stem from events in 1980. Interest rates reached record levels early that year, which meant that card issuers found their cost of funds rising to record levels as well. State usury ceilings in place at the time capped the interest rate that could be charged on consumer loans. With market interest rates bumping against ceilings in many states, credit card lending became unprofitable. Many states passed emergency legislation to raise the ceilings on interest rates. And the Federal Reserve Board established a national requirement of 30-days' advance notice for all changes to the terms of credit card accounts. This requirement superseded the multitude of state regulations regarding cardholder notification, and thus allowed card terms to be changed more quickly and more frequently. Card issuers responded, raising interest rates and adjusting other account terms. (Section VI reviews the 1980 experience in more detail.)

By 1985, market interest rates had fallen dramatically, while credit card rates remained high. The national average for credit card interest rates was reportedly 18.62 percent, while the prime rate was down to 9.5 percent and the discount rate—the rate at which the Federal Reserve lends to banks—was at 7.5 percent. The wide gap in rates caught the attention of consumer groups and policymakers, initiating the first round of many efforts to reform card pricing (U.S. House 1985).

Reform efforts have fallen into two categories: those aimed at forcing issuers to disclose more fully and clearly the terms of the charge accounts they offer and those aimed at restricting issuers'

ability to set account prices. Many of the proposals to restrict pricing also incorporate measures to improve disclosure. While the benefits of disclosure measures are themselves debatable, this article addresses only pricing restrictions.

### *Early reform efforts*

In 1985, legislators introduced several bills into Congress that aimed to cap credit card interest rates. (Table 1 summarizes these and other selected legislative efforts.) Each bill set a maximum level for the annual percentage interest rate (APR) that could be charged on a credit card account. The caps were flexible in that they tied the maximum APR to some market interest rate, rather than fixing it at a specific level. Two bills were introduced in the House of Representatives. One limited the APR to five percentage points above the 90-day commercial paper rate. The other restricted the APR to six percentage points above the 3-month Treasury bill rate unless a study of competition in the card industry found existing rates to reflect the cost of funds and degree of competition for new card accounts. Bills tying the APR to yet other market rates were introduced into the Senate. Subcommittees held hearings on all measures, but that is where congressional action ended.

Almost as soon as the 1985 bills had been dismissed, others took their place. Like the 1985 bills, these all restricted the amount by which the maximum APR could exceed some base interest rate. One of the measures ultimately became an amendment to other legislation but was voted down 56 to 356 in the full House.

After that, the movement to cap credit card rates waned. The most likely reason was a gradual decline in card rates brought about by increased competition in the credit card market. For instance, a week before the hearings on the 1987 bills, American Express introduced its Optima card, which carried a 13.5 percent APR compared to the market average APR of about 18 percent.

Table 1

## SELECTED EFFORTS IN THE MOVEMENT FOR CREDIT CARD PRICING REFORM

Legislation	Purpose
<i>1985: Credit Card Interest Rate Limitation Act</i>	To cap the maximum APR on credit card accounts at six percentage points above the 3-month Treasury bill rate.
Resurrected in 1986: Credit Card Account Holder Protection Act 1987: Credit Card Interest Rate Limitation Act	
Variations introduced in 1985: A bill to amend the Truth in Lending Act	Would set the cap at five percentage points above the 90-day commercial paper rate.
National Credit Card Consumer Protection Act	Would set the cap at five percentage points above the 6-month Treasury bill rate.
Credit Cardholder Protection Act (resurrected in 1987 and again in 1991)	Would set the cap at four percentage points above the interest rate charged by the IRS for delinquent tax payments.
1987: Credit Card Fairness Act	Would set the cap at five percentage points above the Federal Reserve's discount rate.
Credit Card Account Holder Protection Act	Would set the cap at six percentage points above the Federal Reserve's discount rate.
Competitive Credit Card Interest Rate Act	Would set the cap at eight percentage points above the 1-year Treasury bill rate, but not to supersede any lower state limits.
1994: Credit Card Interest Rate Cap Act	Would set the cap at nine percentage points above the 6-month Treasury bill rate.
<i>1991: Credit and Charge Card Disclosure and Interest Rate Amendments Act (passed in the Senate)</i>	Allows President, after a study of the card industry's competitiveness, to set a rate cap at ten percentage points above the 6-month Treasury bill rate.
<i>1997: Credit Card Consumer Protection Act</i>	To prevent card issuers from imposing fees for on-time payment of credit card bills.
Resurrected in: 1999: Credit Card Consumer Protection Act (pending)	
Variations introduced in: 1998: Amendment to the Consumer Bankruptcy Reform Act (passed in the House) Credit Card On-Time Payment Protection Plan	Would also prevent canceling an account because of on-time payment.
1999: Consumer Credit Card Protection Amendments (pending)	

Source: Authors' compilation from U.S. congressional records. Unless otherwise indicated, neither the House nor the Senate passed the legislation.

*Mission accomplished—almost*

Efforts to cap credit card rates resurfaced unexpectedly in 1991. During a fundraising event in November, President George Bush deviated from his prepared statement to remark, “I’d frankly like to see the credit card rates down. I believe that would help stimulate the consumer and get consumer confidence moving again.” Congress sprung to action. The next day a bill was introduced in the Senate to cap credit card interest rates at four percentage points above the rate the IRS charged for underpayment of taxes. This would have put the maximum allowable APR below the prevailing average rate by approximately five percentage points. Even more surprising, the bill passed in the full Senate the same day—after only 30 minutes of discussion, and by a vote of 74-19. The House followed the Senate’s lead, introducing equivalent legislation the next day.

Bush’s advisers and cabinet members joined industry experts in opposing the rate cap. Treasury Secretary Nicholas Brady called it “wacky, senseless legislation.” The Nilson Report, a card-industry newsletter, said that with a 14 percent cap, banks would lose \$9.73 per card if they kept their current customers. The president of MasterCard International put the potential loss at \$3.10 per \$100 of card loans, which he said would make credit card lending “uneconomical.”

A week later, when the House debated the legislation, all signs seemed to point to its passage. But when the stocks of banks with large credit card portfolios plummeted, reportedly in response to the expected vote in favor of the measure, Congress immediately dropped the matter. This is the closest federal rate-cap legislation has gotten to passage (Bacon and Wessel; Bary; Moletsky; Pae; and Quint). Only once since then, in 1994, has Congress introduced similar rate-cap legislation, and that bill died in subcommittee.

*From rate caps to fee caps*

More recently, legislative efforts to restrict card pricing practices have focused on the fees imposed on card users rather than on the interest rate charged. These efforts were motivated by GE Capital Corp.’s September 1996 announcement that it would impose a \$25 annual fee on holders of GE Rewards credit cards who regularly pay their balances in full. A spokesperson for GE Capital described the fee as modest and designed to “offset operating and administrative costs associated with our rewards program.” GE would waive the fee if a cardholder paid at least \$25 in interest charges annually. Ruth Susswein, president of Bankcard Holders of America, calculated that GE was making a profit of \$318 on a customer who carried an outstanding balance, but was losing \$30 on those who repaid in full each month (Coulton).

One legislator, concerned about the impact on consumers of what had become known as “the GE fee,” took action. In 1997, Representative Joseph Kennedy introduced a bill to prohibit the fee (in other words, to cap the fee at \$0). The bill also would have prohibited retroactive interest on charges not paid during the grace period—the period from the statement date to the date by which payment must be received to avoid interest charges. It also would have frozen rates and fees on canceled-card balances.

The threat of legislation was enough to induce most issuers to cancel plans to impose GE fees. Issuers instead took other steps to cover the cost of serving customers who repaid their bills in full. In one case reported shortly after Kennedy’s bill was introduced, a bank that issued credit cards for a wholesale club canceled the accounts of 42,000 club members who incurred little in interest fees. When the wholesale club sued, the bank agreed to reopen the accounts of cardholders who would pay a \$30 annual usage fee (Arditi).

Congress fired back the next year when the Senate passed an amendment to a pending bankruptcy reform bill. The amendment would prohibit the imposition of fees or penalties or the cancellation of cards solely because cardholders pay their bills in full. Before year's end, the House agreed to a version of the bankruptcy bill containing the provisions in the Senate's amendment, but the Senate did not. Meanwhile, Congressman John LaFalce introduced into the House a bill similar to the Senate's amendment. That bill was introduced too late in the 105<sup>th</sup> Congress to be addressed, so LaFalce reintroduced it in early 1999 as H.R. 900. The bill would prohibit the imposition of higher fees or interest rates, other penalties, and the cancellation of card accounts, for cardholders who pay their balances in full. Other bills, closer to Kennedy's in that they would not prohibit the canceling of cards due to on-time payment, emerged in both the House and Senate about the same time.

These latest bills, like the rate-cap bills that preceded them, are simply efforts to impose price controls—legal restrictions on what prices card issuers can set for their products. The effects of such restrictions depend on how credit card borrowing is priced. The price consumers really pay for a card depends, in turn, on the many price and nonprice terms of a card account and on industry factors that determine how issuers set account terms. The next section describes the former, while the subsequent section discusses the latter.

## II. THE PRICE OF CHARGING IT

Credit cards are an extremely complex product, serving many different roles. A credit card gives a consumer access to a source of credit and thus serves both as a way of borrowing against future income to make purchases today and as a source of funds for an emergency. It also provides a means of making transactions and, in many cases, a source of services such as discounted travel via accumulated frequent-flyer miles or rental-car insurance. Because of the variety of services a

credit card offers, the *effective price* for the consumer (the true cost) of a card depends not on a single price, but rather on an array of price terms and product features. This section describes the many components of a card's effective price and the link between those components and issuers' profits.

### *The effective price of a credit card*

To understand the factors determining the effective price of a credit card, it is useful to consider the pricing of freshly brewed coffee at an espresso bar. The retailer typically charges a *posted* price for, say, a small or large coffee. This is the major component of the price of a cup of coffee. But frequent-buyer discounts—such as one cup free for each ten cups purchased—are commonplace at such establishments. A retailer can directly change the *effective* price of a cup of coffee either by changing the posted price or by changing the frequent-buyer component of price. In addition, the retailer can indirectly affect the cost to customers by altering the size of the cups used. This would change the effective price per ounce. Finally, nonprice aspects of the cup of coffee can be altered to affect the coffee's value from the customer's perspective. If a higher quality bean is used, or the roasting process improved, or the wait in line shortened, then the cup of coffee becomes a better value for the customer, which means the customer's effective price is lower.

Likewise, the effective price of using a credit card is determined by the card's various price and nonprice components. The major component is associated with the fundamental service the card offers—access to a line of credit. Unlike automobile loans and home mortgages, which are secured by the asset being purchased with the loan, the vast majority of credit card borrowing is unsecured. Card borrowing is also very flexible in that the customer is free to choose when and how much to borrow (at least within the credit limit), as well as the repayment schedule. The dollar volume of card purchases that a

consumer does not pay off, or “revolves” to the next billing cycle, is treated as a card loan, and the price per dollar borrowed is the interest rate (that is, the APR). The customer incurs a monthly finance charge, which is determined according to a formula set by the card issuer for applying the APR to the revolving balance. Some issuers charge a higher APR for revolving balances that originate from instant cash loans, called “cash advances,” than they do for balances incurred through purchases. A 1998 survey of bank card issuers by the American Bankers Association (ABA), summarized in Table 2, found evidence of a variety of card product offerings and price components.

Though the average APR for revolving credit card loans has been above 10 percent for decades, most issuers still charge no interest for the very short-term borrowing done when cardholders pay their bills in full within the grace period. In effect, cardholders can borrow funds interest free from the time a purchase is made until the end of the grace period. In fact, according to the ABA, between 35 and 43 percent of cardholders in 1998 did not revolve balances or incur interest charges.

The non-APR components of a card’s price include an assortment of fees. There are annual fees, along with penalty fees triggered by actions such as late payment or charging beyond the credit limit. Some accounts are even subject to up-front fees for cash advances (in addition to the APR on cash advances) or for use of the card to pay taxes.

The effective price of a credit card also is affected by the card’s nonprice features, which include the number and quality of services that cardholders can access with their cards. Today, many cards offer customers frequent-flyer miles, extended warranties for goods purchased with the card, various forms of travel insurance, travel and emergency assistance, and credit insurance. Standard (or classic), gold, and platinum cards are distinguished in part by the services offered. On

some accounts, most of the extra services are available free of charge. Like improvements to the roasting process for coffee in an espresso bar, the provision of additional or enhanced services improves the quality of a credit card, thereby lowering the effective price of the card to consumers.

### *Making money from cards*

Card issuers are in business to make money, and the effective price they charge in large part determines their profits. Interest income depends on the APR, the length of the grace period, the method of calculating the finance charge, and default rates. According to the ABA survey, interest accounts for at least 65 percent of revenue for the average issuer. This revenue is generated by customers who revolve balances. Annual fees and other fees imposed on cardholders account at least for another 11 percent of revenue. For a majority of issuers, other fees contribute more to revenue than annual fees. Nonprice aspects of credit cards, such as the quality of customer service offered and the provision of rental-car insurance, affect issuers’ profits through both revenue and cost. Issuers can attract and retain more customers and earn more revenue by improving quality, but they also incur higher costs from doing so.

The credit card industry is unusual, however, in that there are third parties from whom issuers can earn revenue. In fact, the bulk of the remainder of issuers’ revenues comes from fees imposed on merchants who accept their cards. These fees, known as interchange fees, are a percentage of total card purchases. The major card associations (Visa, MasterCard, etc.) set interchange-fee rates, so issuers’ choice of card association determines their interchange rate. According to the ABA survey, interchange fees account for as much as 20 percent of issuers’ revenues, making them the major source of revenue from cardholders who do not hold revolving balances. For the purposes of this article, interchange fees

Table 2

## BANK CARD ISSUERS' PRICING, MARKETING, AND PERFORMANCE

1998 (average per bank except as noted)

Pricing, marketing, or performance measure	Small issuers (44 banks)	Midsized issuers (24 banks)	Large issuers (8 banks)
Accounts with revolving balances	65.0%	65.0%	57.0%
Card products offered (% of banks):			
Standard/classic	100.0%	100.0%	100.0%
Gold card	75.0%	87.5%	100.0%
Platinum card	—	4.2%	37.5%
Banks segmenting market (% of banks)	8.1%	41.7%	62.5%
Criteria for market segmentation (% of banks):			
Account revenue potential	25.0%	42.9%	100.0%
Account risk level	50.0%	100.0%	100.0%
Total cost per active account	\$157.47	\$65.69	\$44.51
Top three factors in setting interest rate on standard/classic cards (ranked)	1. Competition 2. Cost of funds 3. Operations costs	1. Competition 2. Aggregate risk by market segment 3. Operations costs	1. Aggregate risk by market segment 2. Cost of funds 3. Competition
Banks offering standard/classic cards with three or more different APRs (% of banks)	18.7%	58.5%	80.0%
Grace period (% of accounts)			
None	4.0%	5.0%	—
25-30 days	96.0%	85.0%	86.0%
Other	—	10.0%	14.0%
Banks charging annual fees on standard/classic cards (% of banks)	50.0%	71.4%	85.7%
Sources of revenue (1997) (% of total revenue):			
Interest	67.0%	65.0%	78.0%
Annual fees	4.0%	8.0%	1.0%
Interchange fees	20.0%	17.0%	9.0%
Other fees	8.0%	7.0%	10.0%
Other	1.0%	3.0%	2.0%

Source: American Bankers Association, *1998 Bank Card Industry Survey Report*, 7th ed., Washington, 1998. Results are based on a nationwide survey of the 250 largest card issuers and a random sample of smaller bank card issuers. Small issuers are those with less than \$50 million in card outstandings or less than 50,000 card accounts with balances. Midsize issuers are those with \$50 to \$749 million in card outstandings or 50,000 to 749,999 card accounts with balances. Large issuers are those with at least \$750 million in card outstandings or at least 750,000 card accounts.

are relevant mainly because of the greater flexibility they provide issuers in setting the effective price to consumers.

### III. A LOOK INSIDE THE CREDIT CARD INDUSTRY

In the absence of regulation, the structure of the credit card industry determines the effective price of a card and issuers' flexibility in adjusting the components of effective price. This section discusses the link between industry structure and credit card pricing. Three conclusions emerge. First, although some structural characteristics of the industry tend to induce very competitive pricing, others might give some issuers limited power to price noncompetitively. Second, differing characteristics, supply costs, and revenue potential across consumers make it possible—and even attractive—for issuers to segment the market into distinct consumer groups by offering cards with different price and nonprice features. Third, these features of the card industry are critical determinants of the impact pricing restrictions have on consumers.

#### *Competitiveness and market power*

The credit card industry has two features usually associated with competitive industries—a large number of firms and an absence of barriers to entry. In fact, today thousands of issuers populate the industry, and new entry continues. Technically, only a banking institution can issue cards, but this does not keep nonbanks from competing. Nonbank issuers can enter by opening a credit card bank themselves or by forming contractual relationships with existing bank card issuers. Among recent successful nonbank entrants are Sears, which began issuing the Discover Card in 1986, and AT&T, which entered the market with the Universal Card in 1990. This ease of entry and the large number of issuers limit issuers' ability to price noncompetitively—that is, above cost. In fact, in the ABA survey, all but the largest issuers cited competition as the leading factor in setting

the interest rate on standard/classic cards.

But despite the ease of entry and large number of firms, the industry displays some noncompetitive features. Earnings from credit card lending have tended to be high relative to earnings from other types of bank lending, according to a U.S. General Accounting Office report. This suggests that new entry has not, for some reason, dissipated profits, as would be expected. Complementing the earnings evidence is a study by Shaffer, which shows the presence of market power for the industry as a whole. Market power exists when a firm can set the effective price of its card above the cost of providing an additional card (which includes an allowance for providing the owners of the firm a reasonable return on their investment). Notably, Shaffer finds market power to be concentrated among a few card issuers, while the majority appeared to set price at the cost of providing additional card accounts.

An issuer's market power depends on consumers' sensitivity to the effective price. This sensitivity, in turn, reflects how strongly consumers perceive one card to be a substitute for another. Some economists have found evidence that consumers as a whole are relatively insensitive to at least one component of a card's price—the APR. They have attributed this insensitivity to costs of searching for and switching to a new card that make cards poor substitutes for one another (Ausubel; Calem; Calem and Mester). If consumers perceive such costs to be high, they might not expect to find a card offering an effective price that justifies searching or switching. As a result, at least some issuers could have greater freedom to price above cost without losing customers.

Another explanation for the limited card substitutability and thus market power that appears to exist is product differentiation. An issuer can differentiate its card product from those of its competitors by incorporating distinct features into the card. Product differentiation



can be profitable when preferences for card features or card usage differ across consumers. For example, the many cards that donate a proportion of purchases to nonprofit organizations are examples of these efforts. So is the card that bears Elvis' likeness. Consumers might be willing to pay a bit more for such card features, giving issuers market power.

#### *Market segmentation—revolvers and convenience users*

Even if an issuer does not differentiate its products from its competitors, it still might want to engage in product differentiation to segment the market for its own cards. With market segmentation, an issuer offers a line of card products, each geared to a distinct part of the market and bearing a different mix of price or nonprice features. Because each product is more closely tailored to the demands of a distinct customer group, the issuer can better exploit its market power and improve profitability than it could without market segmentation.

Of bank card issuers included in the ABA study, 18.5 percent segment their market based on the revenue potential or risk level of card accounts. The availability of gold and platinum cards in addition to the basic standard/classic card is evidence of this. Many issuers also vary rates, fees, and other account terms, such as the grace period, across different card types and thus different market segments.

At least two major market segments with distinct risk and revenue profiles can be identified within the credit card industry. One is the market for revolving credit; the other, the market for convenience card use. Demand in the market for revolving credit comes from revolvers—consumers who routinely revolve their balances. Revolvers can differ from one another in their credit risk to issuers but on average are more risky than customers who always repay their balances in full. The credit demand of revolvers is relatively sensitive to the APR because they typically

incur finance charges that are a large share of their total cost of card use (Stavins). In fact, issuers' revenue from serving revolvers comes primarily from those finance charges. By far the largest expense associated with supplying revolvers is the cost of loanable funds. The next largest expense is losses from bad debt and fraud.

The convenience-use market segment consists of two types of cardholders: those who generally do not revolve a balance and thus are relatively insensitive to the APR charged, and those who always pay their bills in full and are completely insensitive to the APR. Most likely, the majority are of the first type, revolving an outstanding balance only if they accidentally miss a payment deadline, make an unusually large purchase that they prefer to pay for over time, or suffer a temporary shortfall in income. For analytical purposes, then, they can be thought of as revolvers, and the second type, the pure-convenience user, can be thought of as constituting the convenience-use market segment. Pure-convenience users generate revenue for card issuers primarily through interchange fees.

#### *Why market power and market segmentation matter*

The two features of the credit card industry just described—market power and market segmentation—have implications for the effectiveness of pricing restrictions. Market power matters because it allows issuers to raise price above cost. Its presence thus creates the possibility that a pricing restriction can be set to reduce the gap between price and cost, which could potentially benefit consumers. Market segmentation matters because attempts to restrict card pricing have fallen into two categories—caps on interest rates for credit card loans, and caps on fees and penalties for convenience-only use. APR caps directly affect the revolving-loan segment, whereas fees for convenience use affect only the convenience-use segment.

Because of the distinct characteristics of revolvers and convenience users and the fact that legislative initiatives have targeted the groups differently, pricing restrictions on card issuers are analyzed in two parts. Section IV examines the effects of pricing restrictions on the revolving-loan market segment, while section V does so for the convenience-use segment.

#### IV. THE EFFECTS OF PRICING RESTRICTIONS TO BENEFIT REVOLVING BORROWERS

The implications of a pricing restriction in general depend on two factors: the presence of market power, as already discussed, and the extent to which issuers can adjust the unrestricted components of effective price in an effort to circumvent the restriction. Because of the latter, the imposition of a cap on one component of effective price lowers the level of that component, but might not lower the effective price to consumers. The reason is that issuers who were pricing to maximize profit before the imposition of a pricing restriction generally will have lower profits under the restriction. Odds are they will need to adjust one or more of the unrestricted effective-price components to continue maximizing profit while operating under a price cap. Again, using the espresso bar analogy, a retailer facing a price cap on coffee could discontinue the frequent-buyer deal, buy lower quality beans, reduce the amount of coffee per cup, and so forth. Cardholders, like coffee drinkers, likely would be willing to accept some adjustment of the unrestricted effective-price components because they benefit from the lower level of the restricted component. This holds even for card issuers who lack market power. Consequently, after a pricing restriction is imposed, issuers are likely to set the various components of effective price in a way that limits the restriction's impact.

The remainder of this section addresses the implications of an APR cap for consumers. The results hinge on whether issuers can adjust the

unrestricted components of effective price to circumvent the cap and on the degree of market power. They are summarized in Table 3.

#### *When issuers can circumvent the restriction*

When issuers adjust the unrestricted components of effective price to circumvent an APR cap, from the perspective of issuers the effective price remains unchanged. The same is not true for consumers; in general, some of them are worse off from the cap. Because the welfare implications for particular consumers depend on the exact adjustments made, the easiest way to see this result is by considering some examples.

One possibility is that issuers respond to an APR cap by increasing the annual fee a small amount to all customers, both revolvers and convenience users alike. Convenience users are definitely worse off in this case because they pay a higher annual fee but enjoy none of the benefits of a lower APR. Revolvers who carry larger balances are more likely to be better off due to the restriction than those who borrow less. The reason is that heavier borrowers generally will be more willing to pay a steeper fee for access to the now cheaper line of credit. Revolvers as a group will benefit only if the cost to them of the additional annual fee is more than offset by the benefit from the lower APR.

An example with broader repercussions involves an increase in interchange-fee rates to offset the costs of the APR cap. Higher interchange fees increase merchants' cost of selling to customers on credit. To the extent possible, merchants will pass the higher cost on to consumers through higher product prices. In this case, even non-cardholders will be worse off because of the restriction.

These three examples illustrate that consumers in general cannot be said to benefit when issuers can adjust the non-APR components of

Table 3

### ARE PRICING RESTRICTIONS LIKELY TO BENEFIT CONSUMERS AS A WHOLE?

If issuers adjust other components of the effective price to circumvent the restriction	No
If issuers do not adjust other components of the effective price to circumvent the restriction	
And issuers do not have market power	No
And issuers have market power	
And the cap is sufficiently low	No
And the cap is sufficiently high	Yes

effective price to circumvent the rate cap. While some consumers might benefit, others are likely to be harmed by the resulting mix of effective-price components.

#### *When issuers cannot circumvent the restriction*

The second possible outcome arises when issuers cannot adjust the non-APR components of effective price to circumvent the rate cap. In this case, the rate cap lowers the effective price to consumers, who want to borrow more revolving credit as a result. Whether they succeed at doing so and whether they benefit depends on issuers' market power. In general, consumers do not benefit from the pricing restriction.

*When issuers lack market power.* Issuers without market power are already pricing competitively (making all loans for which the revenue per dollar lent is sufficient to cover the extra cost of making the loan). For such issuers, an APR cap is necessarily below the cost of providing additional credit, so customer demand for credit cards is too great from the issuers' perspective. The increase in the volume of credit demanded drives up the cost of providing the additional loans since issuers must pay higher interest rates to attract addi-

tional loanable funds and higher input prices to attract more labor, equipment, etc. But the extra revenue from making those additional loans is less than the extra cost. In the absence of adjustments in the other components of effective price, issuers prefer to ration credit than to make such costly loans. Rationing can be accomplished by issuers raising credit standards and denying credit to higher-risk borrowers. Consumers who continue to get the credit they demand benefit because they pay a lower effective price for it, while those denied credit necessarily are harmed. Or, issuers can instead ration credit by continuing to serve all existing customers but imposing tighter credit limits or increasing the required minimum monthly payment. In the most extreme case, where the rate cap is so low that issuers cannot break even serving the market segment, complete rationing occurs. The market for card credit shuts down, and all consumers are harmed.

The bottom line is that when issuers do not have market power, the benefit to consumers from getting credit at a lower APR may not exceed the cost of reduced availability. Thus, consumers cannot be said to benefit from an APR cap. And depending on the extent to which rationing occurs, they may all be hurt.

*When issuers have market power.* When issuers have market power, there are two possible outcomes, depending on how low the APR cap is set. In the first case, where the cap is sufficiently low, the result is exactly the same as when issuers lack market power: issuers ration credit and possibly cease operation altogether.

In the second case, where issuers have market power and the APR cap is sufficiently high, the result is more promising. Issuers with market power mark up price above the cost of additional lending, creating a range within which an APR cap can fall without inducing rationing. If the cap is set in that range, consumers are willing to borrow more because the APR cap is lower than the current price. And assuming they can earn an adequate rate of return under the cap, issuers are willing to make the additional loans because the cap is at least as high as the extra cost of making them. Customers benefit as a result. They all continue to obtain credit, and they obtain it at a lower effective price.

*Implications for consumers.* These findings suggest that only one situation exists in which an APR cap unambiguously benefits consumers as a whole. That situation involves all issuers having market power, the APR cap being so high that its imposition does not induce credit rationing, and issuers being unable to circumvent the cap by adjusting the non-APR components of effective price. Only then would credit be provided to at least as many customers as without the APR cap, and at a lower effective price, moving the industry closer to the efficient ideal.

But this situation is not observed in today's credit card industry. The evidence presented in section III suggests that most issuers have little if any market power and considerable ability to offset the impact of a rate cap by altering the non-APR components of effective price. And the rate-cap measures often proposed have been quite restrictive. If passed into law, they would have given the average issuer little choice but to shut

down. Consequently, such pricing restrictions cannot be said to benefit consumers as a whole. While some consumers might benefit, others will be harmed.

## V. THE EFFECTS OF PRICING RESTRICTIONS TO BENEFIT CONVENIENCE USERS

Obviously, APR caps do not aim to benefit consumers in the convenience-use market segment. But recent legislative efforts have sought to protect the convenience user by prohibiting (capping at \$0) GE fees—fees for pure-convenience use. Issuers, though, claim that such fees are necessary because of increases in the cost of supplying the market segment. Though cardholders might not tolerate an interest fee applied to the dollar volume of transactions, they might be willing to pay a modest fixed fee to guarantee access to a convenient means of payment and a line of short-term credit for emergencies. Issuers of course must set such a fixed fee cautiously because the number of customers demanding convenience use might decrease noticeably from the fee.

The rest of this section analyzes the impact of a fee cap, taking as the motivation for a GE fee the desire to cover increased costs. Market power should be negligible in the convenience-use market because consumers can always use cash or checks in lieu of credit cards. This leaves the effect of a fee cap dependent primarily on the extent to which the cap can be circumvented through adjustments to the unrestricted components of effective price. The results are summarized in Table 3.

### *When issuers can circumvent the restriction*

A fee cap need not be beneficial—or even neutral—in its impact on consumers when issuers can adjust the unrestricted price and nonprice card features that make up the effective price. It is very likely that issuers will want higher inter-

change rates if prohibited from charging a GE fee since issuers' major source of revenue from convenience users is interchange fees. As already discussed, this can result in higher prices to all consumers.

Similarly, issuers could react to a fee cap by increasing other fees, such as annual fees and late payment fees. These fee increases would have to apply to all customers because the cap prohibits fee adjustments applied only to convenience users. If the fees are increased, then some of the cost of supplying convenience users is passed on to revolvers. Convenience users, however, might not be willing to pay higher annual and other fees; they might, instead, prefer to switch to alternative means of payment.

This analysis suggests that issuers have an incentive to expand and better differentiate their product lines in the hope of increasing their market power and thus their ability to charge higher fees. Customers can be offered upgrades to new card products that provide a wider range of free services in exchange for a higher annual fee. Such efforts at product differentiation are likely to be observed in both market segments. But since issuers have relatively more market power in the revolving-loan market than in the convenience-use market, these efforts are qualitatively less important for the analysis of APR caps.

The conclusion is that when issuers can adjust the unrestricted components of effective price, a prohibition of a GE fee generally perpetuates or induces a transfer of wealth from those who are not pure-convenience users to those who are. Whether this wealth transfer is desirable is a political question, not an economic question.

#### *When issuers cannot circumvent the restriction*

When issuers cannot make sufficient adjustments in the unrestricted card terms, the effective price to convenience users under the fee cap is

below what it would be with a GE fee. More consumers demand cards for convenience use at the lower effective price. If issuers' motivation for imposing the fee was to cover the increased cost of supplying convenience users, the demand for cards for convenience use is higher than they desire. And as before, issuers are likely to engage in credit rationing by supplying fewer convenience cards by reducing or even eliminating the grace period on outstanding cards. This makes convenience users more profitable by turning them into revolvers. Card cancellation is another likely rationing method. Customers who charge a low dollar volume of purchases and thus who generate little interchange-fee revenue are the most likely to experience this practice. In the extreme case, issuers cease operation because they cannot earn an adequate return supplying the market segment. Either approach drives some convenience users to switch to using cash or checks for a larger share of their purchases. If convenience users were making their most preferred mix of cash, check, convenience credit card, and revolving credit purchases before the GE cap was imposed, which is reasonable to assume, then they are harmed by the cap.

#### *Implications for consumers*

The bottom line from this analysis is that a cap on GE fees is likely to hurt, rather than benefit, consumers. At a minimum, convenience users are worse off because of adjustments to price terms and product features or because of credit rationing. And all consumers can be harmed if interchange rates are raised and passed on in higher product prices.

## VI. THE 1980 EXPERIENCE

The United States has one recent experience with binding interest rate ceilings on credit card accounts. This case vividly illustrates that pricing restrictions can indeed lead to rationing and to adjustments in the unrestricted components of

effective price (Schreft). In fact, U.S. consumers have that experience to thank for the annual fees they pay today.

As discussed in section I, in early 1980 market interest rates soared, bumping against state usury ceilings that capped interest rates on consumer credit. This subjected most card issuers to a binding limit on their APR. As a result, their cost of funds exceeded what they could earn on credit card loans, making card lending a losing proposition.

At the first opportunity, card issuers changed card fees and account terms. A congressional survey of 59 card issuers offering 96 distinct charge cards found that the most common response was for issuers to impose an annual fee on their cards. Annual fees were imposed on 49 percent of the cards surveyed. Issuers also rationed credit by not accepting new card applications on 42 percent of cards and by raising credit standards on 41 percent of cards.

Issuers sought to offset the interest rate ceiling more directly by changing the terms of accounts to increase the amount of interest owed on outstanding balances. On 41 percent of cards, the finance charge was calculated differently. On 35 percent of cards, the APR was increased; those increases occurred when and where feasible. And on 23 percent of cards, the minimum monthly payment was raised. For example, Exxon announced that it would include in the minimum monthly payment all single purchases under \$40. Since the cost of the typical tank of gas was well under \$40 in 1980, this change would force most cardholders to pay their bills in full each month. Issuers applied these changes retroactively to outstanding balances on 86 percent of cards, although federal law required that customers be allowed to pay their outstanding balances before the changes

took effect. The 1980 experience thus confirms the prediction that issuers, when faced with restrictions on one component of effective price, will adjust other components and possibly ration, reducing the likelihood that the restriction will be beneficial.

## VII. DO CONSUMERS BENEFIT FROM CREDIT CARD REFORM MEASURES?

Many efforts at credit card reform have aimed to benefit consumers by restricting issuers' pricing practices. But as this article has shown, it is not at all clear that such efforts can achieve their objective. Consumers as a whole are unambiguously better off only under very unusual circumstances—circumstances that do not prevail in today's card industry. More likely, pricing restrictions at best have no effect because issuers get around them by making adjustments in the unrestricted effective-price components. At worst, such restrictions lower the effective price to consumers, but credit rationing occurs, keeping at least some consumers from getting the credit they want. Such an outcome is likely—and was observed in the United States in 1980, when binding restrictions on card interest rates were experienced.

These findings have relevance for pricing restrictions on any good or service, not just credit cards. Within the banking industry, for example, they apply to proposals to prohibit surcharges for automated-teller-machine (ATM) transactions. And in the telecommunications industry, they pertain to restrictions now under consideration on the ability of telephone companies to charge minimum monthly fees for long-distance service. The lesson of this article is clear: pricing restrictions are not in general beneficial for consumers.

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