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THE ECONOMIC AND DISTRIBUTIVE EFFECTS  
OF CREDIT REGULATION

by

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This paper deals with three basic types of consumer credit legislation and the likely effects that regulations implementating this legislation may have had. Before proceeding further, it is important to say something about the criteria to be used in evaluating what can be generally characterized as social legislation--legislation designed with some social objective in mind. The standard tool of the economist for evaluation of economic performance is the normative competitive model. Many question the applicability of this model in the role of evaluation since the legislation being examined more often than not will have come about because of a dissatisfaction with what is perceived to be a market result. More fundamentally, the market results that the legislation seeks to change are those that result from the distribution of income or wealth (broadly conceived) that is viewed as being less than satisfactory. By altering prices (broadly conceived), the legislation seeks to alter this distribution. Thus, it is argued, the effects of the legislation can only be interpreted as "bad" since the benchmark for evaluation assumes, implicitly or explicitly, the original distribution of income (and the resulting set of market prices).

Such criticism should be taken seriously, although it should not be used to invalidate the insights provided by application of the competitive norm in evaluation procedures. Nor should the assertion of "less than perfectly competitive" markets be used to disallow the use of this evaluative tool. It is difficult to assess the "degree" of competition in markets, much less to determine how much is "enough". Unless a convincing case can be made for the absence of any competitive pressure of substance (even

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in the case where only one seller is observed in the market) we are probably best served by assuming that the behavior of the firm is influenced by the forces of competition.

It should also be noted that there are few instances of social legislation where all parties affected agree on its need. Since such measures are typically redistributive, once again it would seem to be important to find out just how and to what extent redistribution takes place. Again, the competitive model provides a framework for identifying firm (usually the agents of redistribution) and consumer behavior and determining the cost of making those transfers, even if such estimates are (necessarily) based on the "old" prices.

Thus, this paper will employ the basic tenets of supply and demand and the underlying models of consumer and firm behavior. The results will be subject to disagreement (when all firms in a market charge the same price, both competition and monopoly offer explanations) but analysis should offer considerable insight into the effects that regulations have. Furthermore, the analysis will provide substantial insight into the (probable) success of regulations in attaining established objectives set forth in the regulations or in the legislative history of the law.

## RATE CEILINGS

The basic intent of rate ceilings seems to be to protect the consumer in a market environment in which he or she is perceived to be at a substantial disadvantage relative to the lender, and thus (potentially) subject to the imposition of excessive charges. Some will admit that the objective of such regulation is to prevent certain consumers from getting credit, "for their own good." Such regulation raises several important questions, some of which cannot be answered by standard economic analysis. To the extent that regulators intend to influence how consumers allocate their funds, analysis can indicate to what extent the ceilings are effective in doing that, and, to the extent that consumers "evade" the intended regulatory effect, offer evidence that, from their own (the consumer's) point of view, such regulation is not in their best interest.

One case for rate ceilings utilizes the model of imperfect competition which is simply illustrated in figure 1. Here, the lender, in order to maximize its profits, restricts lending to  $L_1$  and charges  $P_1$ . The regulator could increase credit availability (contrary to the intent of some regulators) by setting a rate below  $P_1$  but above  $P_2$ , providing more credit at a lower rate. The "margin" for regulatory adjustment then lies between  $P_1$  and  $P_2$ . A rate set lower than  $P_2$  would provide less credit than currently provided, although at a much lower rate. Note that the size of this "margin" depends on the degree of competition in the market. The more competitive, the flatter the demand curve facing the firm and the smaller the difference between  $P_1$  and  $P_2$ . If this interval is quite small, then a substantial reduction in the rate allowable may establish a market price below  $P_2$ , contracting total credit availability

in the process. Many consumers will, of course, benefit, receiving their credit at a very low rate. This raises two important questions to be answered: (a) which consumers benefit from a lower rate and (b) which consumers are damaged? Beyond this, it is desirable to estimate the magnitude of these "benefits" and "damages" where possible.

Another case for rate ceiling asserts that the consumer demand for credit is not sensitive to the rates charged, and that all that consumers care about are the monthly payments and the goods and services they intend to buy with the funds they borrow. Thus, we find that the consumer has a demand curve like that depicted in figure 2. Here, the consumer can be charged very high rates without substantially affecting the amount of credit demanded by the consumer. Thus, it is argued, the consumer will pay whatever is necessary to get the desired amount of credit. Two points of interest are raised by this analysis. First, even if the consumer's demand is highly rate inelastic, the lender must behave in a noncompetitive fashion in order to take advantage of it, being either a monopolist, or colluding to be sure that no competitor will offer lower prices.<sup>1/</sup> Second, if the consumer is characterized by very inelastic credit demand, then rate ceilings will not prevent the consumer from getting this credit, regardless of the cost. Thus, the market in which loan sharks operate comes into existence unless lenders will accommodate all demand at the lower, regulated rate ( why shouldn't they if it is profitable?). The lower the rate set, the larger the potential for new credit markets becomes.

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<sup>1/</sup>More generally, the lender cannot charge a rate premium higher than the cost to the consumer of seeking out another source of credit.

At best, rate ceilings can prevent only legal lenders from providing credit to the highest risk consumers. Setting a legal ceiling rate in fact determines which consumers (in terms of risk class) can be served by legal lenders and which cannot. Given a set of population characteristics, the lower the rate ceiling is set, the larger the potential illegal market becomes.

To summarize to this point, unless firms are charging rates above the required to cover costs, rate ceilings cannot provide cheaper credit to the marginal consumer. Rather, ceilings will result in credit restriction, and provide cheaper credit only to those that still qualify. The argument that consumer credit demand is interest-inelastic is not a sufficient criteria for "protective" rate ceilings. Unless firms are in fact charging excessively high prices, the rate ceiling will reduce credit availability. Since consumers are insensitive to the cost of credit, they will seek it elsewhere, presumably from more expensive sources than prior to the regulation, otherwise these other sources would have been used originally. Thus, the "marginal" consumer is not cut off from credit (for his own good), but rather forced to find more expensive sources that will continue to make credit available.

To better see the distributive implications of rate ceilings, assume that there is only one characteristic of consumers that is related to credit risk - UNRELIABILITY. A hypothetical distribution of unreliability is shown in figure 3. Here, the population is divided into 5 groups, the first being the most reliable and the fifth being the least. Further, assume that all credit granting costs are the same except for bad debt losses which depend only on UNRELIABILITY. Figure 3a illustrates the

cost curve for providing credit services as a function of RELIABILITY. The cost of extending credit rises with increasing unreliability (bad debt losses and collection expense). Assuming no rate restrictions, and that firms can identify the UNRELIABILITY of a consumer, each consumer would, in a reasonably competitive environment, be charged what it cost to service him.

However, if an effective ceiling rate is imposed,  $P^*$ , then only consumers with reliability of  $R$  or better (segment  $OR$ ) will be served. In this simple example, only consumers in UNRELIABILITY groups 1, 2 and 3 will get credit, while others will be excluded. These consumers will be those with the characteristics associated with low reliability (highly variable incomes, proclivities toward irresponsibility, etc.). Notice that credit availability has, in principle, nothing to do with the value of having access to credit for the consumer.

From this rather simple treatment of rate ceilings, the following predictions can be made:

- (1) Rate ceilings will result in a contraction of credit unless firms are charging prices higher than costs due to imperfections in market structure and the ceiling is not set too low.
- (2) If the total demand for credit is very inelastic, rate ceilings which reduce credit availability will force consumers to substitute more expensive sources of credit for those eliminated by the ceiling.
- (3) Consumers rationed out of a particular market will be those that are, on average, the most expensive to serve, most likely those with lower incomes, less stable jobs, and poor credit histories.

The next step is to determine whether or not empirical data available are consistent with these findings. During the last few years, a considerable literature on the effects of rate ceilings has developed. References are included in the bibliography. To my knowledge, none contain findings that are inconsistent with the points made above. The following findings represent the results of some of my own work in the area.

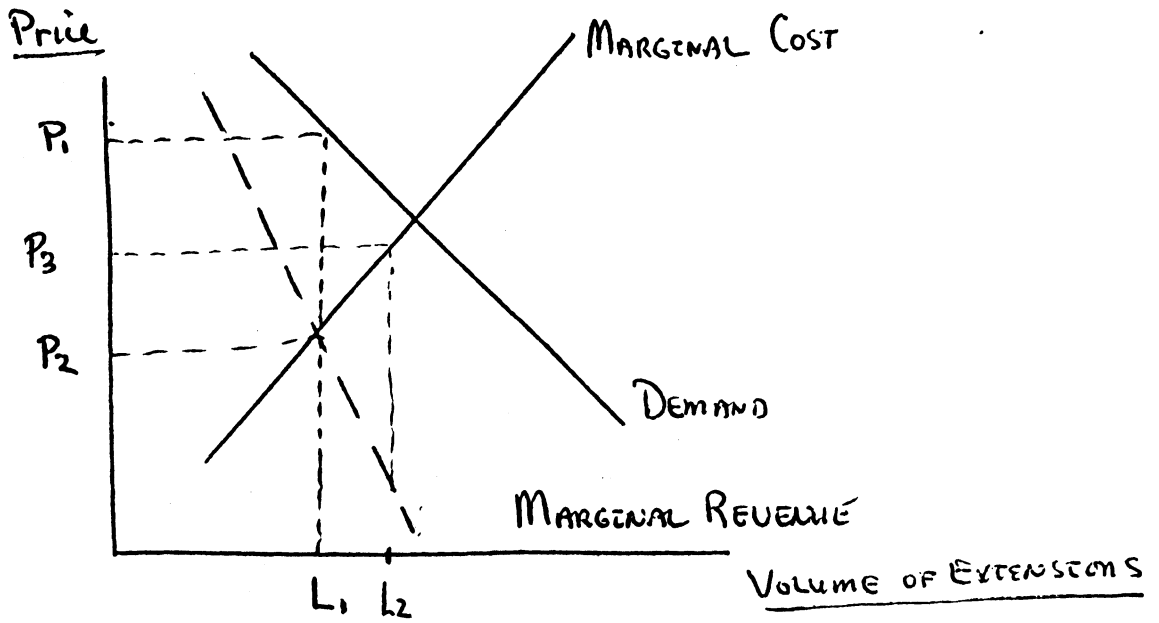
In 1969, Initiative 245 was passed by a narrow margin in Washington, lowering the rate ceiling applicable to revolving credit from 18 percent to 12 percent. The theory presented earlier predicts several lender responses to such a change: (a) lenders may find an alternative way to charge existing customers for the credit card service<sup>2/</sup> and (b) the firm may adjust its lending costs by raising its credit standards and shift funds to other activities. In 1974, there was considerable evidence that rationing had indeed occurred. As can be seen in Table 1, Washington retail store credit card users had many fewer such cards than their counterparts in other states. Ownership of T&E cards was relatively unaffected, since these cards are not credit cards, in that the balances cannot be revolved and paid off as on a bank or store card. Thus, the rate is of substantially less consequence.<sup>3/</sup> Oil company cards are owned

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<sup>2/</sup>In some states where rates have been lowered, banks have instituted annual fees to supplement the revenues lost from a lower rate ceiling (Minnesota for example; in Arkansas, courts have ruled that such a charge does not violate the 10 percent rate ceiling).

<sup>3/</sup>Some purchases can be made on a T&E card on a deferred basis if prior arrangements are made. Otherwise, only late charges are assessed while collection of the full amount owed is undertaken.





ONE LENDER

FIGURE 1

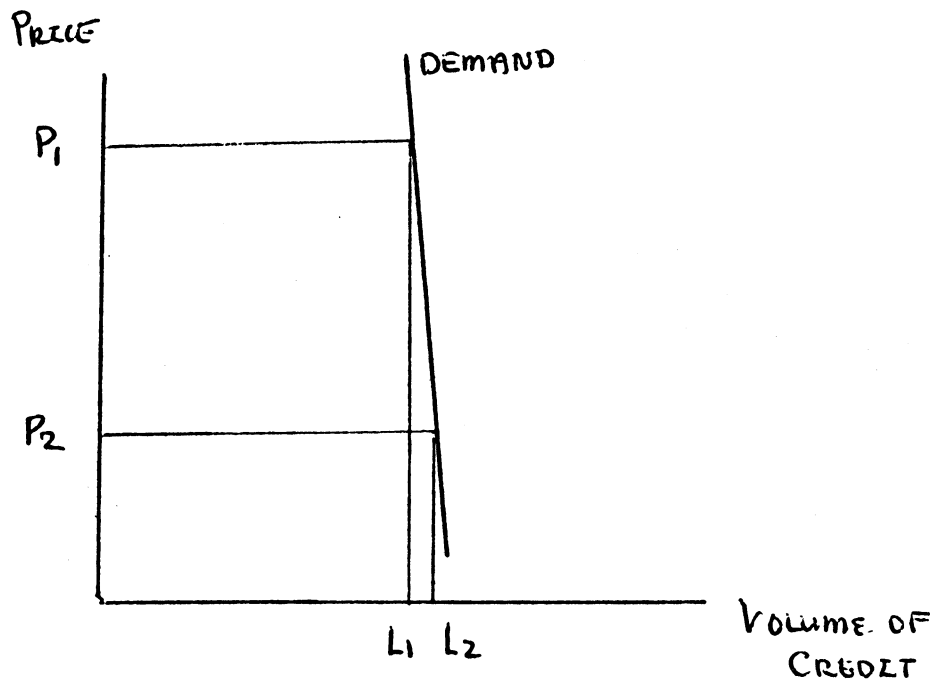


FIGURE 2

FIGURE 3a

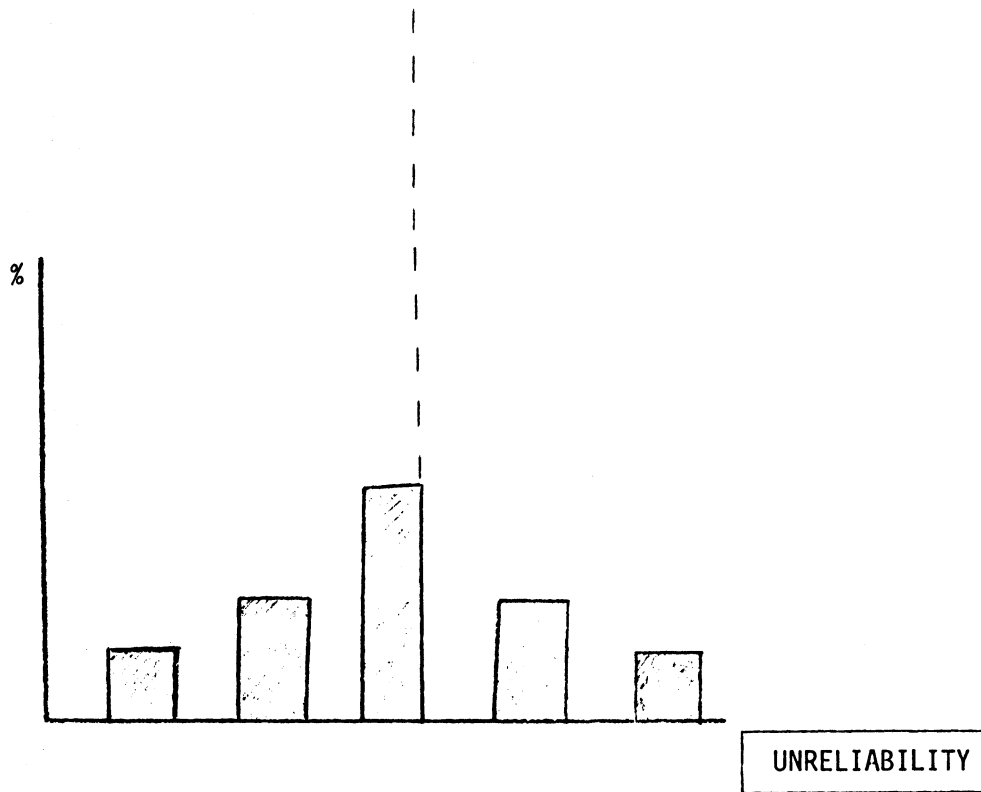
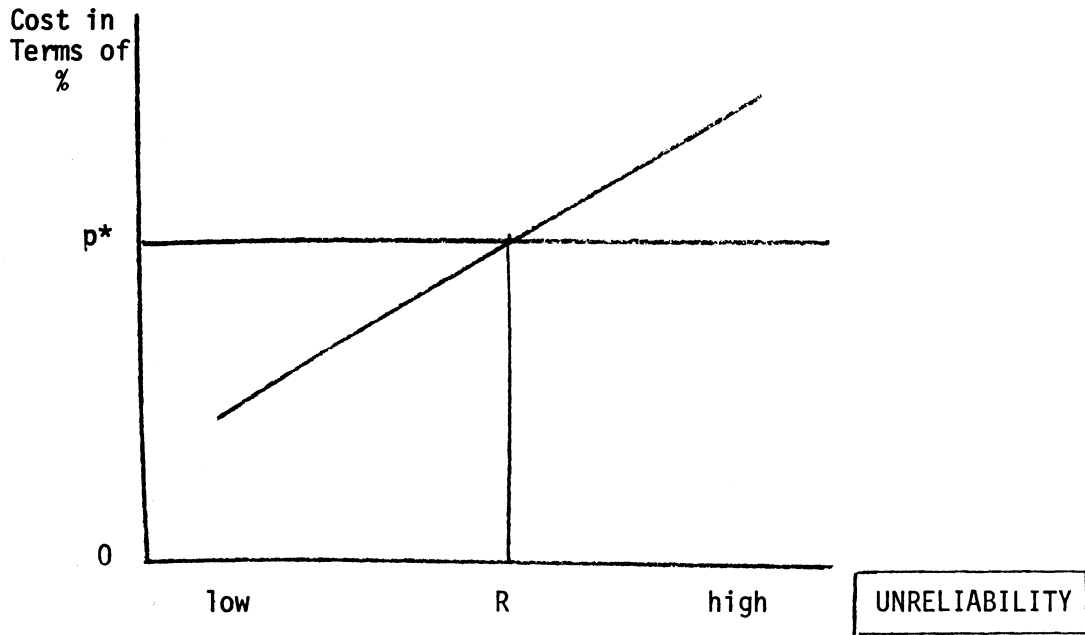


FIGURE 3b

less frequently in new finance companies (whose rates were not affected by Initiative 245) than in other states, while bank loans and other regulated sources were used less (see [15]).

In a recent study of the bankcard market in California and Washington, more evidence consistent with the predicted effects of the rate ceiling were developed. Not surprisingly, finance charge revenues made up a lower fraction of credit card revenues in Washington (12% ceiling) than in California (18%), while merchant discounts provided a larger share in Washington.<sup>4/</sup> In California, 4 percent of the accounts were delinquent, compared to 1 percent in Washington (Table 3). This suggests that the Washington banks have accepted a much less risky group of consumers to give their bankcards to. This is also reflected in the relative cost of delinquent and bad debt expense as a percent of total credit card costs. In Washington, delinquency and bad debt accounted for 18 percent of the cost of the credit card operation, compared to 36 percent in California.

When firms tighten their credit standards, as the banks in Washington apparently did, the incidence of the contraction in credit availability disproportionately affects credit card users with lower incomes. An example is presented in Table 4. If retail stores in New York were to raise their minimum acceptable score to 80, 5 percent of the users in 1973 (or more accurately, applicants like them) would become ineligible for retail store credit. Thirty-five percent of this group had incomes below \$7,500, although among all users, this income group accounted for only 9 percent. Thus lower income applicants would be denied access to

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<sup>4/</sup> On average, merchant discounts were .5 percentage points higher in Washington than in California. Other things equal, this suggests a larger general subsidy to credit card use in Washington than in California.

TABLE 1  
COMPARATIVE CARD OWNERSHIP

	<u>Washington</u>	<u>California</u>	<u>New York</u>	<u>Texas</u>
<b><u>Retail Cards</u></b>				
None	<u>1/</u>	<u>2/</u>	<u>3/</u>	<u>4/</u>
1-2	46%	25%	26%	27%
3-4	33	36	34	30
5 or more	<u>21</u>	<u>39</u>	<u>40</u>	<u>43</u>
	100%	100%	100%	100%
<b><u>Bankcards</u></b>				
None <sup>5/</sup>	43%	32%	33%	32%
1	41	48	41	37
2 or more	16	20	26	31
<b><u>T&amp;E Cards</u></b>				
None <sup>5/</sup>	86%	83%	77%	81%
1	12	13	19	16
2 or more	2	4	4	3
<b><u>Gas Cards</u></b>				
None <sup>5/</sup>	27%	16%	45%	11%
1	18	19	16	12
2	23	21	15	18
3 or more	32	44	24	59

<sup>1/</sup>All holders of at least one department store credit card selected from a representative sample of Washington households selected by Reuben Donnelley. The survey was conducted in 1974.

<sup>2/</sup>Based on a sample of retail credit accounts selected from the files of California retailers by Touche Ross & Co. The survey was conducted in 1970.

<sup>3/</sup>Based on a sample of retail credit accounts selected from the files of New York retail stores. The survey was conducted in 1973.

<sup>4/</sup>Based on a sample of 550 account holders at Sears Roebuck & Co. in Texas. The survey was conducted in 1971.

<sup>5/</sup>Includes those who did not answer the question. It is assumed that they had no cards of the type specified: 6% for bankcards; 21% for T&E cards; 3% for gas cards in the Washington study.

TABLE 2  
TOTAL NUMBER OF CARDS OWNED

Family Income	Number of Cards					
	1 - 4 cards			5 - 9 cards		
	Wash	Calif	N. Y.	Wash	Calif	N.Y.
Under \$7500	53%	52%	45%	41%	24%	54%
\$7501-10000	49	16	70 <sup>a/</sup>	43	53	22 <sup>a/</sup>
\$10001-15000	41	15	38	47	59	46
\$15001-20000	25	16	24	56	60	51
\$20001 or more	12	9	10	47	41	45
All	36%	18%	30%	47%	49%	45%

Family Income	Number of Cards					
	10 - 14 cards			15 cards or more		
	Wash	Calif	N. Y.	Wash	Calif	N.Y.
Under \$7500	6%	22%	*	*	2%	*
\$7501-10000	6	31	8 <sup>a/</sup>	2	*	* <sup>a/</sup>
\$10001-15000	10	24	11	2	2	5
\$15001-20000	18	20	21	1	4	4
\$20001 or more	32	38	35	9	12	10
All	14%	28%	20%	3%	5%	5%

<sup>a/</sup> This jump appears to be due primarily to lower gasoline card ownership for this income group. Ownership of larger numbers of cards is therefore lower.

to credit at disproportionately high rates (relative to their incidence in the credit card using population).

#### RESTRICTIONS ON CREDITORS ABILITY TO COLLECT OBLIGATIONS

Debt collection activities are the source of many "horror stories" which most of us would probably agree are somewhat tragic, not so much because of the tactics used, but because having to pay the obligation owed often imposes considerable hardship on the consumers involved. Be that as it may, our consideration here must be somewhat more balanced and objective. Effective restriction of creditor remedies implies that it is more difficult (costly) to collect a given volume of credit obligations made to consumers with a given set of characteristics. The cost of enforcing contracts is increased. The basic result of such regulations would seem to be a restriction in credit availability, especially for those consumer where enforcement problems are more likely to arise.

For the purpose of exposition, consider the cash loan market, and assume for the moment that the probability of default is not influenced by a lessening of credit remedies. Then, the effect of such restrictions can be approximated by a leftward shift in the supply curve of credit to a given type of customer.<sup>5/</sup> This is illustrated in Figure 4.

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<sup>5/</sup>This is because the supply curve reflects the cost of providing a particular good or service. It shows the price that must be earned to induce a supplier to produce a given unit of goods or service, given the costs of production. Restricting creditor remedies raises the cost of "production" for loans by making collection more difficult (expensive) and raising bad debt losses. Thus, the expected cost of extending credit rises for all loan sizes. The shift need not be parallel, but may diverge with increasing loan size if customer performance is affected by the remedy loss or is a function of loan size.

TABLE 3

BANK CARD STATISTICS:  
California and Washington  
1973-1975 (averages)

	<u>California</u>	<u>Washington</u>
Percent of Total Credit Revenues <u>Earned as</u>		
Customer Finance Charges	71%	55%
Merchant Discounts	14%	28%
Late Charges	1%	2%
Percent of Active Accounts That were Delinquent	4%	1%
Delinquent Account Costs as A Percent of Total Credit Card Costs <sup>1/</sup>	36%	18%

Source: Credit Research Center, Purdue University

<sup>1/</sup>Includes bad debt losses.



TABLE 4

Simulated Rejections of Credit Cardholders  
by Credit Score Cutoff Points  
New York ~~xxx~~ Retail Credit Card Users, 1973

<u>Retail Score</u>	<u>Cumulative</u> Per cent of Account Holders Affected ↙	<u>Percent with Income Under</u>			
		<u>\$7,500</u>	<u>\$10,000</u>	<u>\$15,000</u>	<u>\$20,000</u>
Raise to 70 (70 to 80)	3.9% (1.0)	29% (53)	32% (53)	48% (76)	84% (99)
Raise to 80 (80 to 90)	4.9 (3.7)	35 (17)	37 (31)	55 (64)	89 (70)
Raise to 90 (90 to 100)	8.6 (3.5)	27 (36)	34 (44)	59 (53)	81 (69)
Raise to 100 (100 to 110)	12.1 (5.9)	29 (7)	37 (32)	57 (74)	78 (85)
Raise to 110 (110 to 120)	18.0 (6.3)	22 (7)	36 (28)	62 (46)	80 (71)
Raise to 120	24.3	18	34	58	78
<u>Bank Score</u>					
Raise to 24 (24 to 29)	1.6% (5.0)	89% (36)	89% (48)	100% (75)	* (85)
Raise to 29 (29 to 34)	6.6 (11.8)	50 (19)	58 (53)	82 (74)	89 (92)
Raise to 34 (34 to 39)	18.4 (17.9)	30 (8)	55 (29)	77 (58)	91 (84)
Raise to 39	36.3	19	42	68	87
<u>Sample Income Distribution</u>		8.9%	17.3%	42.0%	68.4%

Source: [29]

1/ Figures in ( ) show the incremental proportions of the population affected and the income distribution for that group alone.

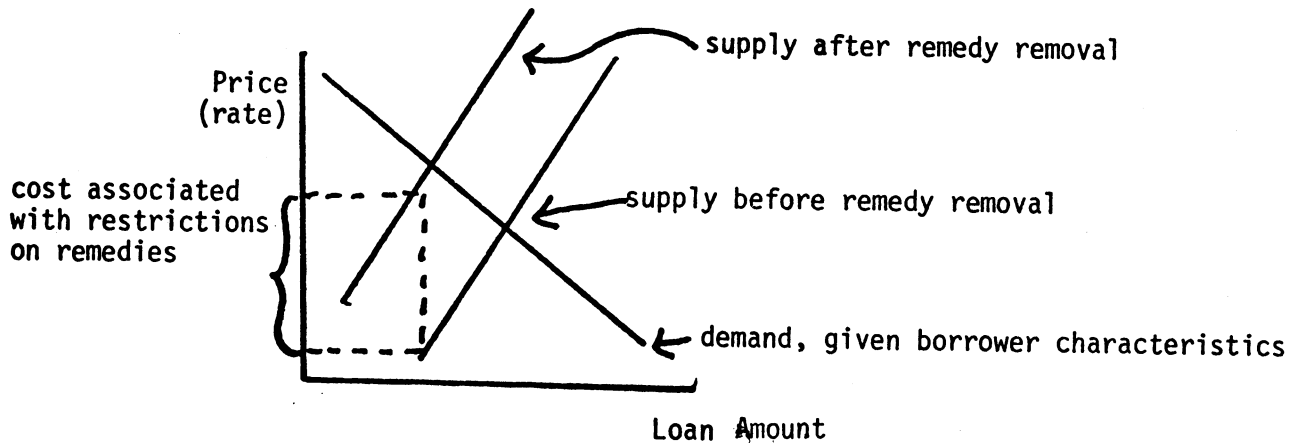


FIGURE 4

Note that less credit is available at any given rate after the remedies are restricted, reflecting the higher cost of providing credit. Consumers also want less credit at these prices.

Where rate ceilings are in effect, the results are somewhat different:

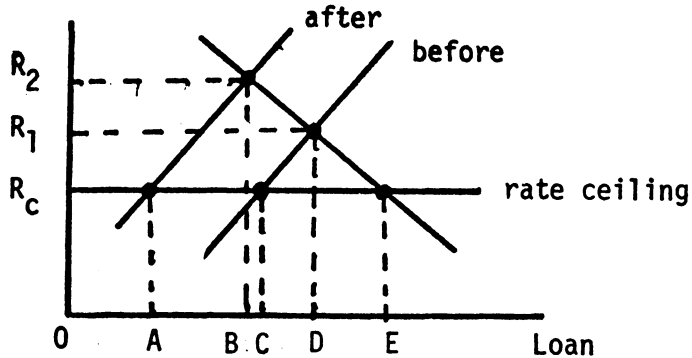


FIGURE 5

With ceiling rates, for this class of borrower, it can be seen that:

- (a) The maximum amount of credit available before regulatory change (C) is less than what consumers would like at the regulated price (E) or would get in an unrestricted market (at a higher rate) D.

- (b) The adjustment to the loss of remedies is fully reflected in the maximum loan amount, which shrinks from C to A. In an unregulated market, credit available would fall only to B, not A, and the price would be higher. Consumers would get the amount of credit they desired, given the costs of producing that credit.

Figure 5 shows that with effective rate ceilings, the restrictions are fully reflected in availability. Comparing Figures 4 and 5, it can be seen that restrictions on remedies coupled with effective rate ceilings provide the least amount of credit, in spite of the wishes of consumers (as reflected in the demand curve). With no restrictions, the consumer would demand loans amounting to D and pay a price  $R_1$  that reflected the cost of providing that loan. With rate restrictions, the consumer, by law, pays only  $R_c$ , but suppliers will extend credit only in the amount of C, to reduce their exposure to possible losses and collection costs. With restrictions on remedies and no ceiling, consumers could borrow B at a rate of  $R_2$ , but, with a ceiling, lenders will supply only A, the smallest amount of credit in all these scenarios.

Now assume that there are two types of customers, High Risk and Low Risk. High Risk customers have few sources of credit or other funds and have lower, more volatile incomes. Low Risk borrowers have higher, more stable incomes, and more alternatives for borrowing. These circumstances are reflected in the elasticities of their demand curves (Figure 6).

Past experience in dealing with these two types of customers have shown that the High Risk group more often miss payments, require more attention, and more often default on their obligations, resulting in

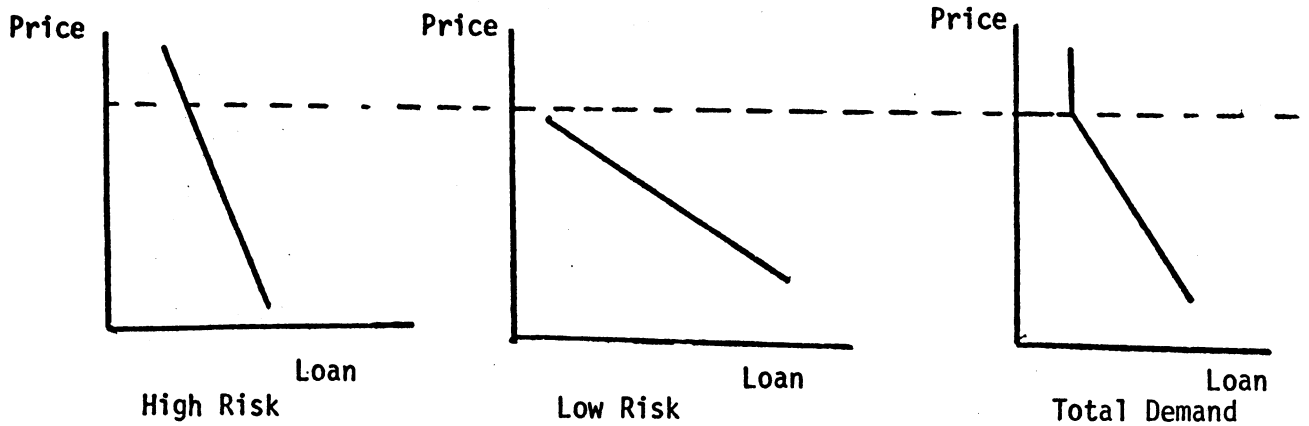


FIGURE 6

legal action, repossession, etc. The Low Risk group has a very low rate of delinquency, and rarely defaults on an obligation. This experience is reflected in the supply curve of credit to each group, showing the price the lender must receive to extend (risk) a given amount of credit to borrowers in a particular group (Figure 7).

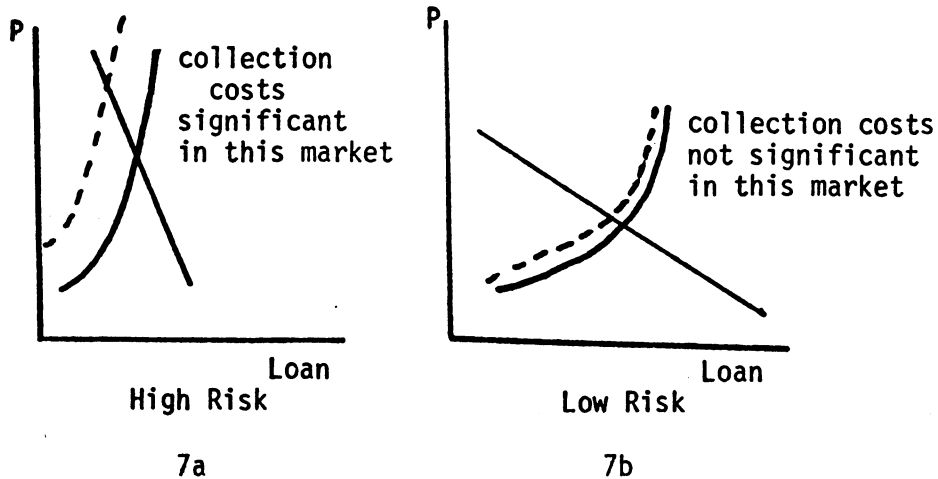


FIGURE 7

Restricting remedies will raise the costs of providing credit in both markets, as collection will become more expensive and less successful. This will be particularly true in the High Risk market where delinquency and collection problems are much more frequent. The effect may be to eliminate almost completely the legal market serving higher risk borrowers (Figure 7a).

This result has several interesting implications for empirical work in this area:

- (1) A restriction on remedies will have its major effect in the high risk market, since the activities affected by these restrictions are much more frequent in that market, and the associated costs are a much more important part of the total cost of providing credit. The supply curve would shift to the left relatively more in the High Risk market.<sup>6/</sup>
- (2) If the market to high risk borrowers were highly restricted or non-existent due to other restrictions (such as low rate ceilings), a restriction of remedies would not have a major noticeable effect on lending activities. Although costs would still go up, the low incidence of delinquencies and credit losses would make it difficult to measure an increase in the cost of or reduction in the availability of credit

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<sup>6</sup>This process is analagous to the effects of raising the cost of gasoline and then comparing the effects on the supply curves of transportation services where fuel is a major element of the cost of providing services to the effects on the supply curve of a product not using gasoline as an input, directly or indirectly.

Thus, most of the restriction in credit falls on the high risk market, where collection costs are a significant part of doing business and consequently, where restrictions on remedies will have a major effect on costs and therefore supply. Since expected customer cost (expected cost of servicing a given customer, including risk of default and associated expenses) is not homogeneous within each group, some rationing may also occur in the Low Risk market, as shown in Figure 7b.

A study of bank lending responses to restricted creditor remedies produced evidence consistent with the simple model of lender response discussed here, but also illustrated the difficulty of separating effects that resulted from the regulatory change from effects on bank policy caused by other factors. The Wisconsin Consumer Act was passed in 1973, substantially limiting the scope of legal devices used by lenders to collect debts owed. To attempt to measure the importance of such restrictions and to determine the effects such restrictions had on lender behavior, a questionnaire was sent to about 600 Wisconsin banks. The questionnaire did not mention the Act and was designed to elicit the major concerns of the bank, asking questions about major policy changes made since 1972 and the most important reasons for those changes. Actual data on lending activity were also collected for 1972, 1973, and 1974, bracketing the year the Act was passed.

Usable responses were received from 186 banks. Of these, 53 percent reported no major policy changes since 1972 (although a substantial proportion of these later reported higher rates and fees and tighter lending standards for reasons other than economic conditions). Of the 46 percent that did report at least one major policy change, 41 percent said they

had tightened their credit standards, 29 percent had restricted loan maturities and increased the minimum size of the loan required (while 5 percent reported lengthened maturities or eased minimum loan requirements) and 11 percent reported higher rates and fees (1 percent reported lower rates) - Table 5. More specific responses are shown in Table 6. Here responses were not limited to the first three given (as in Table 5) but rather inventories the written responses of the banks (thus, a slightly higher proportion reporting tighter lending standards). Tighter lending standards and a reduction in marginal loans typified responses of 48 percent of the banks that made policy changes. Nearly 11 percent of the banks stopped making loans for household goods, and 13 percent raised downpayment requirements. Over 9 percent restricted small loan activity, and 21 percent reported higher rates (exclusive of fees, etc.).

There are, of course, many factors that could produce the type of firm behavior documented, including a decline in economic activity. In fact, 18 percent cited economic conditions as a reason for policy changes, and 20 percent blamed the cost of funds, both factors directly related to our recent economic experience. However, 88 percent of the firms making policy changes cited regulatory restrictions, including 23 percent that cited restricted creditor remedies and collection procedures (Table 7). In addition, 5 percent blamed the "cost of compliance" 16 percent, increased paperwork, and 2 percent reported higher legal costs. Thus, at least in terms of frequency of response, regulatory considerations dominated the reasons cited for the policy changes reported in Table 7. This is true even when the first mentioned (and presumably most important reason for policy change) is tabulated (Tables 8 and 9).

TABLE 5  
CHANGES MADE IN DIRECT LENDING POLICIES

<u>Changed Direct Lending Policies Since 1972<sup>1/</sup></u>	<u>N</u>	<u>%</u>
NO	98	53
YES	85	46
Credit Standards		
Tightened		41%
Eased		*
Maturity, Loan Size		
Restricted		29%
Eased		5%
Use of Collateral		
Restricted		5%
Expanded		4%
Rates, Fees		
Higher		11%
Lower		1%
No Answer	<u>3</u> 186	<u>1</u> 100%

\*Less than .5%

<sup>1/</sup> Question 1a: Please describe the three most important policy changes you have made.

Source: [14]



TABLE 6

SELECTED SPECIFIC POLICY CHANGES  
 (Responses to Q1a, Appendix Exhibit B-1)

<u>Policy Change</u>	<u>Percent of Sample</u> <sup>1/</sup>
Tighter Lending Standards	42.4%
Fewer "marginal" loans	5.9%
Collateral Loans	
More required	5.9%
Fewer than before	5.9%
No loans for household goods	10.6%
Higher Downpayments	12.9%
Shorter Maturities	2.7%
Longer Maturities	2.2%
Fewer Small Loans	9.4%
Switch to Open End	2.7%
Higher Rates (excluding fees)	21.2%

<sup>1/</sup> Figures add to more than 100 percent since multiple responses were permitted. These percentages may be slightly larger than those reported in Table 5 since responses in excess of the first three reported are included here.

TABLE 7  
REASONS FOR CHANGING LENDING POLICIES<sup>1/</sup>

<u>REGULATORY RESTRICTIONS:</u>	<u>88.2%</u>
Remedies; Collections	23.5%
Collateral	5.9%
Indirect Paper	2.4%
Rates; Credit Insurance	1.2%
General Reference	50.6%
Disclosure	4.7%
<u>HIGHER COSTS</u>	<u>61.2%</u>
Cost of Funds	20.0%
Cost of Compliance	4.7%
Paperwork	16.5%
Legal Costs (	2.4%
General Reference	12.9%
High Loan/Deposit Ratio	4.7%
<u>QUALITY OF LOANS</u>	<u>37.7%</u>
Low Quality	16.5%
High Loan Demand	3.5%
Delinquencies, Losses	17.7%
<u>LOWER EARNINGS ON CONSUMER LOANS</u>	<u>5.9%</u>
<u>ECONOMY</u>	<u>17.7%</u>

<sup>1/</sup>Adds to more than 100 percent since firms gave up to 3 responses to Q1b.  
Question 1b: What were the most important reasons (in order of importance) for these changes?

TABLE 8  
REASONS FOR SPECIFIC POLICY CHANGES  
(First change mentioned only)

<u>POLICY CHANGE**</u>	<u>Reason For Policy Changes</u> <u>Restrictions on:</u>					<u>Number</u> <u>of</u> <u>Responses</u>
	<u>Collections</u>	<u>Collateral</u>	<u>Regulations;</u> <u>W.C.A.</u>	<u>Cost of</u> <u>Compliance</u>	<u>Other</u>	
General Tightening of Lending Policies	9.5%	*	28.5%	9.5%	52.4%	21 (100%)
Higher downpayments; lower loan/value ratios	15.4%	7.7%	23.1%	*	53.8%	13 (100%)
Higher Lending Standards; fewer marginal loans; more information; tougher evaluation	19.2%	2.1%	23.4%	10.6%	44.7%	47 (100%)
Restricted or Abandoned Small Loans	*	*	*	57.1%	42.9%	7 (100%)
Higher Rates	*	4.8%	14.3%	42.8%	38.1%	21 (100%)
Discontinued or restricted collateral use; more unsecured credit relative to secured	25.0%	*	50.0%	25.0%	*	4 (100%)
Require more security	50.0%	*	*	25.0%	25.0%	4 (100%)
Joint signatures required	33.3%			33.3%	33.3%	3 (100%)

Question 1b: What were the most important reasons (in order of importance) for these changes:

TABLE 9

## IMPORTANCE OF FACTORS RESPONSIBLE FOR CHANGES IN LENDING POLICIES

	<u>Mentioned in Order of Importance</u>		
	<u>First Reason</u>	<u>Second Reason</u>	<u>Third Reason</u>
<u>Regulatory Restrictions:</u>			
Remedies, Collections	18.1%	6.6%	2.9%
Collateral (12)	2.4	1.6	5.7
Indirect Paper	1.2	1.6	*
Rates; credit insurance	*	*	2.9
General Reference	28.9	14.8	28.6
Disclosure	3.6	1.6	*
	<u>54.2%</u>	<u>26.2%</u>	<u>40.0%</u>
<u>Higher Costs</u>			
Cost of Funds	10.8%	9.8%	5.7%
Cost of Compliance	1.2	1.6	5.7
Paperwork	4.8	9.8	11.4
Legal Costs	*	3.3	*
General Reference	3.6	6.6	11.4
High Loan/Deposit Ratio	2.4	3.3	
	<u>22.9%</u>	<u>34.4%</u>	<u>34.3%</u>
<u>Quality of Loans</u>			
Low Quality	7.2%	9.8%	5.7%
High Loan Demand	2.4	1.6	*
Delinquencies, Losses	6.0	13.1	5.7
	<u>15.7%</u>	<u>24.6%</u>	<u>11.4%</u>
<u>Lower Earnings on Consumer Loans</u>			
	1.2%	6.6%	*
<u>Economy</u>			
	6.0%	9.8%	11.4%
<u>Number of Responses</u>	83	61	35

Question 1b: What are the most important reasons (in order of importance) for these changes?

## REASONS FOR CHANGING LENDING STANDARDS

Changed Lending Standards	N	%	Restrictions on:		Consumer Protection Laws	Cost of Operation	Cost of Funds	Economy	Account Experience Delinquencies Bankruptcies Bad Debt Losses
			Remedies	Collateral					
Loosened	11	5.9%	*	*	*	*	9.1%	9.1%	*
Unchanged	58	31.2	--	--	--	--	--	--	--
Tightened									
Somewhat	82	44.1	20.7%	6.0%	30.6%	6.0%	36.6%	48.9%	33.0%
Substantially	31	16.7	25.8	6.5	71.0	9.7%	16.1	19.4	19.4
No Answer	4	2.1	--	--	--	--	--	--	--
All Firms	186	100.0%	13.4%	3.8%	25.3%	4.3%	16.1%	25.3%	17.7%

\*less than .5%

Adds to more than 100% since firms could give up to three responses.

Question 3: Since 1972, has your bank had to tighten its lending standards overall, or has your bank been able to loosen its lending standards somewhat, or have they stayed about the same?

Question 3a: What were the major reasons for changes in standards?

The banks were questioned directly about changes in lending standards (Table 10). Six percent reported that standards had been liberalized over the period (1972-75), 30 percent reported standards unchanged, and 61 percent reported tighter standards.<sup>7/</sup> Again, the reasons given for tighter standards were dominated by references to the regulatory limitations contained in the Act (and probably in other laws such as the Fair Credit Reporting Act, Fair Credit Billing Practices Act, Truth in Lending, etc., since all of these have been issues at one time or another during the period studied). For all banks reporting changed lending standards, 25 percent cited the economy, and 16 percent the cost of funds. Forty-two percent directly cited regulations, and another 18 percent blamed delinquency and bad debt experience, a product of both regulatory change and the decline in the economy.

Banks were also asked to provide data on their lending activity. Only one table is presented here--that dealing with the number of loans made. Other data are presented in another report [14]. Overall, the number of loans outstanding during the three year period did not change substantially--up .5 percent (Table 11). Most dramatic, however, is the substantial decrease in the number of loans outstanding among banks that reported a substantial tightening of credit standards--a decline of 14 percent over the period. The importance of these figures is heightened by the fact that all of these banks were among the largest in the state (while those reporting loosened standards were all very small). Again, the economy likely contributed substantially to the reduction. However,

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<sup>7/</sup> It is not clear to what extent this is due to factors like inflation that would cause banks to increase the minimum acceptable level of income, or lower the acceptable level of the ratio of debt payments to income, etc.

TABLE 11

AVERAGE NUMBER OF OUTSTANDING LOANS  
BY CHANGE IN LENDING STANDARDS

<u>Change in Lending Standards</u>	<u>Number of Outstanding Loans</u>			<u>1972-1974 Percentage Change</u>
	<u>1972 Mean (N)</u>	<u>1973 Mean (N)</u>	<u>1974 Mean (N)</u>	
Loosened	450 (2)	450 (2)	500 (2)	11.1%
Unchanged	1188 (22)	1265 (23)	1324 (23)	11.5
Tightened				
Somewhat	1523 (20)	1573 (22)	1529 (22)	.4
Substantially	2489 (8)	2263 (8)	2150 (8)	-13.6
All Firms	1489 (52)	1503 (55)	1496 (55)	.5

Number of firms in ( )

as seen by the responses in earlier tables, regulatory restriction apparently played a major role in the contraction.

To be sure, the regulations did not end consumer lending in Wisconsin (although some regulations have eliminated certain segments of the lending industry in some states such as Maine, where all finance companies are now out of operation). These and other regulations only result in what we typically characterize as "changes at the margin" (although in some cases, the margin can be quite large). Models of firm behavior predict rate and availability adjustments to such regulations and the Wisconsin results indicate more precisely the character of some of those adjustments--in particular, tougher lending standards, higher loan minimums, higher rates on loans, a reduction in the use of collateral (which for some consumers may be a good way to lower their risk and get lower rates and for some may be the only way to get credit) and a general shift of funds out of consumer lending and into other lending activities (equating the real marginal returns to the banks portfolios of the "marginal dollar loaned"). And, the tables presented earlier in this paper on rate ceiling effects identified the types of consumers most often affected by the types of lender response documented here. Clearly, such regulation is redistributive, and such information as that presented here must be used by legislators in considering the effects of their efforts in the context of what they hope to achieve.

Laws limiting creditor remedies are good examples of the redistributive aspects of such regulation. This can be seen most easily by using a credit union as a simple example. The credit union is an intermediary which exists in the market because of positive transactions costs. Funds are



provided to the intermediary by depositors. In turn, the intermediary lends out these funds to other consumers and pays the return less operating expenses to the depositors. The intermediary exists because it is more efficient at getting borrowers and lenders together than individual consumers, and can diversify lending risk. Thus, all depositors share the bad debt losses that the intermediary experiences.

Viewed in the context of this simple model, bad debt losses are simply transfer payments from one set of consumers (depositors or lenders) to another set of consumers (borrowers). In many cases, these transfers have many desirable properties, going to less fortunate, lower income people, many of whom may have been the victims of accident, illness, death, job loss or other similar events. These are precisely the people that many of the formal welfare programs are aimed at. Thus, from a social point of view, attempts by intermediaries to collect these debts may be counterproductive, as these attempts represent resources allocated to prevent an otherwise desirable transfer.

However, all transfers must be funded, and in this case the consumers being "taxed" to support the transfers are the depositors of the intermediary. Should the losses become too large (reducing the return earned by the depositor-lenders), deposits, and therefore lending, may decrease. This has many social implications beyond the equity of taxing deposits to support the transfer program.

Table 12 indicates the approximate level of bad debt losses in 1976. In total, these amounted to about \$2 billion dollars, with finance company customers receiving about half of the write-offs. To be sure, not all of these losses are a result of remedy restrictions. Many loans could not be economically collected even with no restrictions. However, it is

quite likely that the legal encumbrances and the outright limitations on remedies is responsible for a substantial amount of these losses. To the extent that lenders rationed credit because of the restrictions or the higher cost of collection, bad debt losses are not as high as they otherwise would have been. Table 13 shows the estimated losses for retail store credit card operations in California and New York. Since credit cards tend to be used by relatively higher income families, these subsidies are less likely to go to low income families, although they may reach families with other difficulties. Even so, among the credit card users, the lower income groups receive a disproportionate share of the losses (Table 14). The lowest income credit card users in California (incomes under \$7,500) made up about 11 percent of the card user population, but received about 35 percent of the losses.

#### TRUTH IN LENDING

The basic objective of Truth in Lending was to provide a standardized price which consumers could then use to shop for credit. If consumers possessed good information, it was argued, it would be more difficult for lenders to take advantage of them. This legislation of course presumes that consumers will indeed shop, a presumption perhaps inconsistent with the assumption of inelastic credit demand.

On the supply side, compliance with legislation like TIL imposes some one time costs and also adds cost, in terms of time, for example, to each transaction. This will shift the supply curve of credit to the left and, in principle, reduce the amount of credit available at each price. Fixed costs also rise due to compliance costs, the need for additional legal services, etc.

TABLE 12  
ESTIMATED TRANSFERS FROM BAD DEBT LOSSES  
(1976)

<u>Credit Outstanding By Type of Lender</u>	<u>Amount (millions)<sup>1/</sup></u>	<u>Estimated Loss Rate</u>	<u>Estimated Net Bad Debt Losses (millions)</u>
Commercial Banks			
Revolving	\$ 13,264	1.0%	\$ 132.6
Other	\$ 71,014	.5%	\$ 355.1
Retailers	\$ 17,726	1.5%	\$ 265.9
Finance Companies	\$ 39,129	2.5%	\$ 978.2
Credit Unions	\$ 30,053 <sup>2/</sup>	.5%	\$ 150.3
Other	\$ 4,147	2.0%	\$ 82.9
			<u>\$1965.0</u>

<sup>1/</sup>November 1976

<sup>2/</sup>Credit unions typically keep delinquent loans on the books for very long periods of time, artificially lowering their loss rate.

TABLE 13

## DEFICIENCY OF CREDIT COSTS OVER CREDIT REVENUES: NEW YORK AND CALIFORNIA

<u>State</u>	<u>Credit Sales</u>	<u>Total Sales</u>	<u>Current Deficiency</u> <sup>1/</sup>	<u>Deficiency at 12%</u> <sup>1/</sup>	<u>Deficiency Percent of Sales</u>	
					<u>18%</u>	<u>12%</u>
California	\$1,413,741,000	N.A.	34,867,361 <sup>1/</sup>	52,057,300 <sup>3/</sup>	.9% <sup>5/</sup>	1.3% <sup>5/</sup>
New York	\$776,453,500	\$2,223,734,000	\$28,841,000 <sup>2/</sup>	\$43,059,900 <sup>4/</sup>	1.3%	1.9%

<sup>1/</sup>[32], Exhibit I

<sup>2/</sup>[29] page 88. Includes 15 stores which use several methods for computing finance charges.

<sup>3/</sup> Assumes the same proportionate increase as found in New York.

<sup>4/</sup>[29] page 88. Assumes that account holders use their accounts in the same way as when an 18% charge was imposed.

<sup>5/</sup> Assumes the same ratio of credit sales to total sales as found in New York.

TABLE 14

## BAD DEBT TRANSFERS AMONG CREDIT CARD USERS

<u>Income Group</u>	<u>Distribution of Credit Card Users</u>	<u>Probability of Default</u>	<u>Delinquent Accounts</u>			
			<u>Distribution of Delinquent Accounts <sup>1/</sup></u>	<u>Average Cost of Collection Activities</u>	<u>Average Debt Written Off</u>	<u>Share of Bad Debt Losses</u>
Under \$5000	5.8%	.044	6.3%	\$32	\$45	9.3%
\$5001-7500	5.5	.175	24.1	\$43	\$33	26.1
\$7501-10,000	14.3	.070	25.1	\$23	\$29	23.8
\$10,001-15,000	24.5	.051	31.0	\$24	\$23	23.3
\$15,001-20,000	21.2	.012	7.6	\$20	\$52	12.9
\$20,000 or more	28.7	.008	5.9	\$16	\$24	4.6
All	100.0%	.040	100.0%	\$28	\$31	100.0%

<sup>1/</sup> Income was not known for 29% of the problem accounts. They are excluded from the distributional percentages. Their collection statistics were virtually identical to the lowest income group, but that assumption can not be strongly supported by the available data.

On the demand side, the effect of TIL is less clear. If consumers on balance underestimated the cost of credit, disclosure of actual rates might result in a reduction of credit demand. If consumers were paying less than they thought, demand might increase. If the total demand for credit was price inelastic, TIL might only result in some shifts in market shares in favor of the (now disclosed) cheaper lenders and a net saving to borrowers (at the expense of depositors).

The presumption of an inelastic credit demand need not preclude shopping on the part of consumers, but suggests this possibility. If the consumer's total demand for credit is insensitive to rates, the consumer might still shop among sources of credit to minimize total costs. If, however, the demand for credit is rate inelastic because of a low expected payoff to search (the consumer does not expect rates to differ very much across lenders, or financing costs are small relative to the size of the transaction or income), then providing rate information will not change consumer behavior.<sup>8/</sup>

The data presented here review the results of several studies of rate awareness among users of retail and bank revolving credit (basically, credit cards issued by retail merchants and banks). Most of the studies are based on samples of retail store credit card users, the exceptions being the 1969 Federal Reserve survey which was based on a representative sample of U.S. households, and the 1977 bank credit card study which

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<sup>8/</sup>To the extent that rate competition was deficient, mandatory disclosure of prices might reduce rates, although if firms were in the position to exploit consumers, they would most likely find other ways to continue the exploitation. Rate disclosures will also tend to narrow differences among lenders in rates offered, reducing the consumer's incentive to search for lower rates.

included only users of bank credit cards. Rate knowledge for revolving credit is affected by the peculiarities of this type of credit instrument:

- (1) Almost every state has a rate ceiling that applies to this type of credit and practically every credit card issuer charges that rate.<sup>9/</sup>
- (2) The consumer is notified of the rate in every monthly billing. An individual with 5 credit cards would probably have the rate "disclosed" 60 times per year.
- (3) Many credit card users use credit cards for their non-credit credit services and therefore have no interest in rates.
- (4) The effective rates, computed on a bank loan (average daily) basis, are lower than the disclosed rates. The discrepancy is especially large for short term loans (a few months in duration).

These differences must be kept in mind when analyzing the data to make inferences about consumer search and awareness for other types of loans. For example, a consumer buying a car may find it worth shopping for credit, even if rate differences are small, because of the large sum of money involved. Once the loan is acquired, however, there is little need to retain the information. For small, one shot loans, search may not be worth it, and the consumer may not become aware of any alternative rates. This type of transaction is typified by purchases of appliances

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<sup>9/</sup>An example of a case in which the market has a single "price." Some observers feel that this is the result of some sort of collusion. Others note that with scale economies present, competition occurs in the form of availability, with each lender trying to make the best possible credit decisions and extend credit card services to every qualified applicant possible.

where the loan amount is several hundred dollars and the dealer is financing the purchase. For a purchase of \$200 financed at 20 percent, the consumer could save about half of the cost by finding a 10 percent loan for the purchase price, a savings of about \$10. In light of the uncertainty of finding a cheaper loan, the cost of driving around and filling out applications and the time involved, it may make good economic sense not to search. This is especially true since the transaction is one made infrequently and there is little subsequent value to be attached to the information gained from search.<sup>10/</sup>

The level of awareness among credit card users is shown in Table 15. The earliest study was done by the Federal Reserve Board, was based on all consumers, and permitted a 2 percentage point "error." With these criteria, 56 percent were considered to be aware of the rates charged. The first study of rate awareness among retail store credit card users was conducted in Texas in 1971. Fifty-seven percent of the credit card users knew the correct rate, a figure that closely approximated the findings in other states with the exception of Washington, where the

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<sup>10/</sup> From the consumer's point of view, the total cost of \$200 of credit includes not only the finance or interest charges, but also the cost of time and travel required to get the credit. If the credit is available point of sale, the bulk of these costs, which can be substantial relative to the finance charges, will be eliminated. As an approximation, the following expression captures the relative effects of search factors:

$$R = \frac{rL + wT + sS}{L}$$

R = total cost of credit, % of loan  
 L = the amount borrowed  
 w = the value of time per unit  
 T = units of time used in search  
 s = other costs per source of credit searched  
 S = the number of searches



ceiling was a political issue that had been the subject of a referendum. The most recent study of credit card users involved bank card users in California. Eighty percent of these consumers knew the correct rate disclosed on their billing statements, a figure substantially higher than that found among the population of retail store credit card users.

Bank credit card users in the early California and the Washington studies have been segregated for analysis in the second row of Table 15. Awareness levels were higher in every state among users of bank cards and in the Federal Reserve study in 1970. It is not obvious why this is the case, since studies have found no significant relationship between awareness and education or number of cards used, two factors related to bank card use that might sensibly explain the differences in awareness.

The rate actually paid on revolving credit is generally less than the disclosed rate, primarily because, unlike a bank loan, there are a certain number of days for which credit is extended but no finance charge is assessed.<sup>11/</sup> In particular, no finance charge is assessed from the date of purchase to the payment date specified on the bill. This could be as long as 60 days and is usually at least as long as the time between the purchase and the billing date. On average, McAlister [23] found the effective rate paid by customers that actually revolved their balances to be 15 percent for amounts actually revolved. Studies done by Touche Ross in California [33] and New York [29] indicated average yields of 7.8 percent and 7.6 percent respectively on all credit sales.

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<sup>11/</sup>The effective rate depends on the method of rate calculation used, the date of purchase and the billing date, and whether a 50¢ minimum finance charge is used. For very small balances, a 30¢ minimum can result in effective rates in excess of nominal rate.

TABLE 15  
RATE KNOWLEDGE<sup>a/</sup>

Percent knowing Correct Rate <sup>b/</sup> Among:	Washington (12%) (1974)	California (18%) (1977)	New York (18%) (1973)	Texas (18%) (1971)	U.S. <sup>c/</sup> (1970)
Retail Store Card Users	66%	—	51%	57%	56%
Bank Credit Card Users <sup>d/</sup>	72%	80% <sup>e/</sup>	58%	—	63%

<sup>a/</sup> Question: When you decide to pay only part of your balance on your department store credit account, what is the annual percentage rate of finance charge (APR) per year?

<sup>b/</sup> Includes those who, in California, New York, and Texas said 18% but did not know the rate was lower for larger balances: 18% in New York and 23% in Texas.

<sup>c/</sup> Reported by Shay and Schober [30, p.8, Table 1] based on the 1969-70 Survey of Consumer Awareness conducted by the Board of Governors of the Federal Reserve System. The definition of awareness was different in this study, allowing responses to vary by 2 percentage points on the monthly rate to be classified as "aware."

<sup>d/</sup> Selected as a subset of retail store credit card users in this study. Consumers using no retail credit cards but having bank cards are not represented in this study.

<sup>e/</sup> Based on a sample of bank card users.

The actual dollar cost of credit extended by various institutions will vary depending on the method of assessing charges, even though the rates disclosed under TIL may be identical. A \$100 bank loan at 12 percent simple interest paid back in 12 equal instalments would cost the consumer \$6.62. That is, in twelve months, the borrower would repay \$106.62. The same \$100 paid back in twelve months on a credit card at 12 percent APR would cost \$5.85 using the previous balance method of rate calculation [23].<sup>12/</sup>

Of all the consumers in the Washington study with a department store credit card (74%), 66 percent knew that the rate for credit cards was 12 percent (Table 16). Almost none of the cardholders said it was less than 12 percent (2%) and 7 percent said the rate was higher (most answering 18%). Twenty-five percent did not give a rate.

The respondents were also asked what a fair dollar cost would be for a \$100 charge repaid in 12 equal monthly payments. Only 6 percent of the respondents gave a number under \$6, and 7 percent said the cost was between \$6 and \$7, an approximately correct answer. But, 46 percent said the dollar cost was \$7 or more, implying annual percentage rates of 20 percent and more. About 40 percent of the respondents did not give an approximate dollar cost.

Half of the respondents that knew the rate was 12 percent said that \$12 was fair, a figure roughly twice the actual cost. Over 60 percent

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<sup>12/</sup>This is because the charge is calculated as 1 percent per month on the outstanding balance. Because there is a "free" period, credit extended by a retailer may frequently be less than an equivalent bank loan which takes into account the actual number of days for which credit is extended.

gave a "fair" figure of \$7 or more, numbers roughly corresponding to rates of 14 percent or higher. (Twelve dollars would be the approximate yield from an extension of credit paid back in equal monthly instalments at a 21 percent APR).

Respondents were asked whether the rate they gave in percentage terms was "too high," "about right," or "too low." About one third said the rate was too high (Table 17). Of those that thought the rate was too high, 16 percent said a fair dollar charge was \$6 to \$7, 16 percent gave a number lower than \$6 and 26 percent did not give a fair dollar charge. The rest, 42 percent, considered a fair dollar charge to be \$7 or more, a figure corresponding to finance rates higher than 12 percent. Nearly 20 percent said that \$12 (or roughly 24 percent APR) was a fair charge.

Among the 40 percent that said a 12 percent finance charge was "about right," 66 percent said that \$12 (equivalent to about 24 percent APR) was fair, and 70 percent gave a dollar charge that corresponded to a rate in excess of 12 percent, even though the legal ceiling is 12 percent. Twenty-eight percent of this group did not give a fair dollar charge, and 2 percent were roughly correct (reporting \$6 to \$6.99 as the dollar charge). Thus, it would appear that if the cost of credit were stated in dollar terms like other prices, a large proportion of consumers would accept as "fair" finance charge rates far in excess of those that prevail today.

Consumers with less than 5 credit cards (35 percent of all cardholders) most frequently reported an accurate estimate of the dollar charge. Of those with 5 to 9 cards, 46 percent (or 79 percent of those answering) gave a dollar amount of \$7 or more and 48 percent (or 90 percent of those answering) with 10 or more cards reported a fair dollar charge that

corresponded to rates higher than 12 percent. The proportion reporting \$12 as a fair dollar charge rose from 27 percent for those with less than 5 cards to 48 percent for those with 10 cards or more. Overall, it appears that the consumers with relatively more credit cards were less well informed as to the dollar cost of this type of credit.<sup>13/</sup>

Table 18 presents data on estimated fair dollar charges by the income class of the credit card user. The highest income groups most frequently provided estimates and also most frequently reported \$12 as a fair charge. In all groups, substantially more than 70 percent of those answering gave an estimate of \$7 or more (equivalent to more than 15 percent per annum). In the two highest income groups (\$15,001 or more), over 80 percent gave such estimates, most reporting that \$12 was a fair charge. Overall, the frequency of consumers reporting a fair dollar charge implying percentage rates in excess of 12 percent rises with income. This is most dramatic for reports of \$12 as a fair charge, with the proportion reporting this rising from 20 percent in the lowest income group to 45 percent in the highest. Relatively more of the higher income users have incorrect perceptions of the dollar cost of department store credit, while relatively higher proportions of lower income users gave no estimate at all.

The overall results suggest that consumers do not have good information about the dollar price of the credit they use. Over 40 percent did not have a firm enough idea to supply an estimate. Of the 59 percent that did give an estimate, 10 percent were too low (6 percent of all credit card users) and 12 percent were about right; 78 percent were too high. The majority of those that were too high gave estimates that were about double the true dollar cost.

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<sup>13</sup>Evidence also suggests that these consumers least frequently use the revolving option on their accounts. Therefore they have less need to become informed.

TABLE 16  
ESTIMATED FAIR DOLLAR CHARGE BY RATE KNOWLEDGE

Fair Dollar Charge <sup>a/</sup>

Rate Knowledge	N	%	Under \$6	\$6-6.99	\$7-11.99	\$12-12.99	\$13 or more	Don't Know	\$7 or more is fair <sup>b/</sup>
Under 12%	11	2%		too few cases					—
12%	351	66%	6%	7%	10%	50%	1%	26%	61%(82%)
Over 12%	35	7%	14	6	26	11	14	29	51%(72%)
Don't Know	133	25%	4	3	7	1	*	85	
All	530	100%	6%	7%	11%	34%	1%	41%	46%(78%)

\* less than .5 percent

<sup>a/</sup> Respondents were asked to give the dollar charge associated with their estimate of the annual percentage rate on department store revolving credit. They were then asked if this dollar charge was "fair" and if not, to give their estimate of a fair dollar charge for such credit.

<sup>b/</sup> Percent of those that gave an estimate of a fair dollar charge that said \$7 or more was a fair charge is shown in ( ).

TABLE 17  
ESTIMATED FAIR DOLLAR CHARGE BY PERCEPTION OF RATE

Fair Dollar Charge <sup>a/</sup>

<u>Thought Rate Was:</u>	<u>PCT DIST</u>	<u>Under \$6</u>	<u>\$6-6.99</u>	<u>\$7-11.99</u>	<u>\$12-12.99</u>	<u>\$13 or more</u>	<u>Don't Know</u>	<u>\$7 or more is fair <sup>b/</sup></u>
Too High	34%(178)	16%	16%	23%	18%	1%	26%	42%(57%)
About Right	40%(212)	*	2	2	66	2	28	70%(97%)
Too Low	1%(5)	too few cases						
No Opinion	25%(135)	3	1	7	6	*	83	13%(76%)
All	530	6%	7%	11%	34%	1%	41%	46%(78%)

\* less than .5%

<sup>a/</sup> Respondents were asked to give the dollar charge associated with their estimate of the annual percentage rate on department store revolving credit. They were then asked if this dollar charge was "fair" and if not, to give their estimate of a fair dollar charge for such credit.

<sup>b/</sup> Percent of those that gave an estimate of a fair dollar charge that said \$7 or more was a fair charge is shown in ( ).

TABLE 18  
ESTIMATE OF FAIR DOLLAR CHARGE BY INCOME OF CARD HOLDER

Estimate of Fair Dollar Charge <sup>a/</sup>

Family Income	Under \$6	\$6-6.99	\$7-11.99	\$12-12.99	\$13 or more	Don't Know	\$7 or more is fair <sup>b/</sup>
Under \$7500	4%	4%	8%	20%	1%	63%	21%(78%)
\$7501-10000	4	8	16	24	2	46	42%(78%)
\$10001-15000	6	10	10	33	2	39	45%(74%)
\$15001-20000	8	4	12	44	1	31	57%(83%)
\$20001 or more	8	5	9	45	1	32	55%(81%)
All	6%	7%	11%	34%	1%	41%	46%(78%)

<sup>a/</sup> Respondents were asked to give the dollar charge associated with their estimate of the annual percentage rate on department store revolving credit. They were then asked if this dollar charge was "fair" and if not, to give their estimate of a fair dollar charge for such credit. See the attached questionnaire for the exact wording and sequence of questions.

<sup>b/</sup> Percent of those that gave an estimate of a fair dollar charge that said \$7 or more was a fair charge is shown in ( ).



Thus, the success of Truth in Lending is unclear. Shay and Schober [30] showed that awareness increased subsequent to its passage, and later surveys suggest that awareness levels may have been maintained, possibly increased, among users of retail revolving credit. But, among consumers in the lower economic strata, there is little evidence to indicate that awareness is high by any standard or that the economics of search and market structure make awareness useful (which may explain in part why these consumers do not search). Even when consumers know rates, they rarely know the actual dollar cost associated with those rates.

Compliance with TIL requirements certainly raised the cost of lending and imposed adverse, although perhaps not substantial, marginal adjustments. In less competitive markets, TIL may have improved rate competition among lenders, although not necessarily on other terms of the loan contract.

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