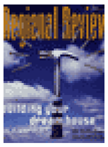


Regional Review
Quarter 4 2000/Quarter 1 2001- Vol. 10, No. 4

ISSUES

in economics

HAS WIDESPREAD USE OF CREDIT CARDS CONTRIBUTED TO THE INCREASE IN PERSONAL BANKRUPTCY?

By Joanna Stavins **§ Credit card delinquencies and personal bankruptcy rates increased during the mid 1990s, despite the strength of the U.S. economy. At a time when per capita income was rising, household borrowing grew at an even faster pace. So did the number of personal bankruptcy filings, which increased 79 percent between 1994 and 1998, faster even than during the 1991 recession. In 1998, there were 1.4 million filings or more than 1 per 100 households. The good news is that filings fell to 1.3 million in 1999, but there are concerns that the number may start rising again.**

These high rates of credit card delinquency and bankruptcy have generated much discussion. Some blame credit card default rates on lenders, arguing that lenient standards have allowed consumers to borrow more than they can repay; others blame borrowers for spending beyond their means. A recent survey by the Federal Reserve Board's Survey of Consumer Finances finds that 88 percent of respondents agree that "credit card companies make too much credit available to most people." At the same time, 90 percent agree that "overspending is the fault of consumers," not issuers. The discussion has extended to the Congress, where both the Senate and the House have passed separate bankruptcy reform bills.

Analysis of Federal Reserve data does suggest that credit card loans have spread to higher-risk consumer groups over time. And there is also evidence that high levels of credit card debt have contributed to the increase in bankruptcy rates. Households that filed for bankruptcy in the past carry higher unpaid credit card balances and had significantly higher ratios of credit card debt to income than those that had never filed. Regions with higher credit card debt relative to income have higher rates of bankruptcy filing. And people who had filed for bankruptcy in the past are more likely to default on their card payments, even after controlling for their income and credit card debt.

So why would banks continue to extend offers to those households, especially since research has found that issuers face "adverse selection?" That is, consumers who accept "worse" credit card offers — those with higher interest rates and fees — are more likely to default and to file for bankruptcy. Analysis of company data shows that while such banks have higher delinquency rates, they do not ultimately have to write off higher losses. They also have higher net revenues from credit card lending than other issuers, suggesting that extending credit to riskier individuals might nonetheless be profitable.

JUST CHARGE IT!

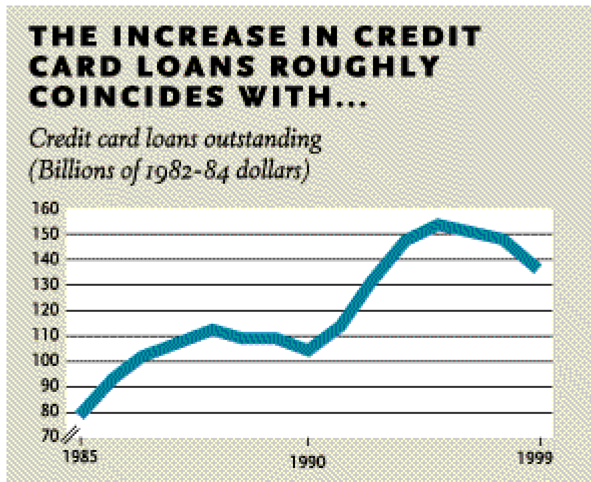
Credit cards have become a common form of payment over the past thirty years, replacing both cash and the installment plans that were once common at appliance stores, furniture stores, and other retail stores that sold consumer durables. Between 1970 and 1995, the fraction of households with at least one credit card rose from 16 percent to 65 percent, according to David Evans of National Economic Research Associates and Professor Richard Schmalensee of MIT. The average ratio of credit card charges to income increased from 4 percent to 16 percent, and the average amount owed on a credit card went up fourfold (in 1995 dollars). Total consumer credit and outstanding credit card loans increased especially steeply during the early to mid 1990s.

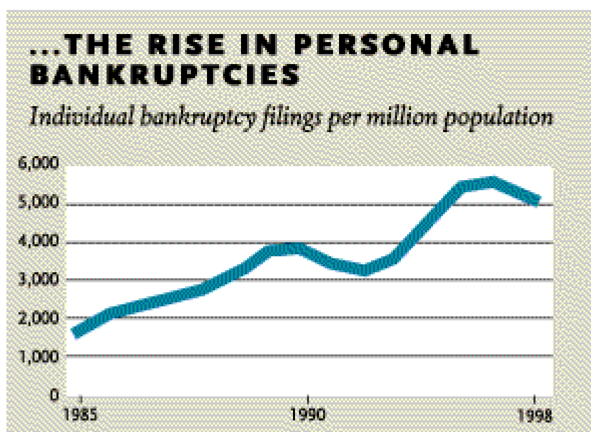
At the same time, strong competition among credit card lenders induced them to offer credit cards to riskier households. Researchers have found that, although credit card debt increased among all income groups, it increased disproportionately among the poor and near poor. From 1983 to 1995, the percent of families with incomes below the poverty line holding at least one credit card more than doubled and their average credit card balance rose from $780 to $1,380 (in 1995 dollars). During the same period, the fraction of households in the highest income bracket with at least one credit card increased only 9 percent, mainly because nearly all of them already held at least one card in 1983. It is important to note that these findings do not indicate whether poorer households are more likely to be delinquent in their payments. The changes could simply indicate more equal access to credit by poorer households.

CREDIT CARD BORROWING AND BANKRUPTCY

It is not easy to prove that credit card borrowing leads to bankruptcy; to do this, data on consumer debt and other demographics would have to be collected *before* the filing took place. But data on bankruptcies are only available after the fact, so one approach is to see whether consumers with certain attributes, such as high credit card borrowing, are more likely to have filed for bankruptcy *in the past*.

Using the 1998 Survey of Consumer Finances, I was able to compare the approximately 8.5 percent of households in the sample that had previously filed for personal bankruptcy with households that had never done so. The average filer had lower income and assets, higher balances on his or her credit cards, and higher other debts. Note that the average total debt was almost identical for the two groups. Since filers most likely discharged any unsecured debt when they filed for bankruptcy, these figures probably underestimate the difference.





SOURCE: Bankruptcy data from American Bankruptcy Institute based on data from Administrative Office of the U.S. Courts. Population data from U.S. Bureau of the Census.

Previous research has found that health problems leading to medical debt were a key factor in a household's decision whether to declare bankruptcy. Those in our sample appear to have characteristics consistent with this view: 21 percent of bankruptcy filers rated their health as excellent compared to 36 percent of nonfilers; and 24 percent rated their health as fair or poor compared to 19 percent of nonfilers. On the other hand, the data showed no significant difference between the groups in the fractions that had health insurance.

Additional analysis supports the notion that higher unpaid balances on credit cards increase the probability of being behind on payments (all else equal), although not by a very large amount. An unpaid credit card balance increase of $1,000 raises the probability of delinquency by 0.23 percent. Doubling the average unpaid credit card balance of $1,817 leads to an estimated 0.42 percentage point increase in the likelihood of default. And consumers with higher unpaid credit card balances are also more likely to have filed for bankruptcy in the past than those with lower balances. This is notable because past filers are likely to have discharged their credit card debt at the time of filing, and they may still face lending limits since a previous bankruptcy remains in their credit reports for up to 10 years.

Strong regional effects also appear to be at work. The fraction of people who file for bankruptcy varies across census regions, and regions with high credit card debt relative to income typically have high rates of bankruptcy filing. New Englanders are significantly less likely to have filed for bankruptcy than residents of other regions. In fact, calculations show that credit card debt is more closely correlated with a region's bankruptcy rate than is total debt (the correlation with total debt is *negative*, possibly because high-income regions have high mortgage debt). The strong regional variation also underscores the importance of institutional factors that may affect the incentives to declare bankruptcy — including differences in state bankruptcy laws that protect assets such as residences, retirement accounts, motor vehicles, and other personal property. These exemption levels vary widely across states — Texas and Florida have unlimited homestead exemptions, whereas Massachusetts exempts only $100,000 — and they may affect an individual's decision to file.

The evidence presented above also suggests that credit card lenders, who have been the main proponents of the bankruptcy reform bill, are partly responsible for their losses because they have extended credit to riskier households. Looser standards probably have also raised the number of personal bankruptcy filings; more stringent lending strategies might curtail them. On the other hand, if credit card borrowers had to bear a larger share of their debt (as a result of bankruptcy reform or some other measure), this might encourage them to align their borrowing more closely with their ability to repay. Because it is typically cheaper for borrowers to know this than their creditors, the social costs associated with bankruptcy might decrease if some of the burden of proof were transferred onto cardholders and cardholders bore more responsibility for their credit card debts.

HOUSEHOLDS THAT FILED FOR BANKRUPTCY
had lower income and were more likely to have been unemployed

	NEVER FILED FOR BANKRUPTCY		FILED FOR BANKRUPTCY (8.5% OF TOTAL)
Has at least one credit card	**73%**		**66%**
Average number of credit cards	**3.6**		**2.9**
Total income	**$53,351**		**$40,951**
Total assets	**$349,912**		**$158,129**
Total debt	**$47,526**		**$47,827**
Amount owed on credit cards	**$1,810**		**$1,898**
Amount owed on car loans	**$2,903**		**$4,813**
Amount owed on educational loans	**$1,497**		**$1,155**
Amount owed on mortgages	**$33,450**		**$33,862**
Amount owed on other consumer loans	**$1,037**		**$404**
Amount owed on other debts	**$503**		**$823**

All payments made on time last year	**59%**		**53%**
Behind by 2 months or more last year	**5%**		**15%**
Unemployed in the previous 12 months	**11.4%**		**16%**
Total debt/income	**89%**		**117%**
Total credit card debt/income	**3.20%**		**4.50%**

Source: 1998 Survey of Consumer Finances
NOTE: Figures are weighted means

THE APPEAL OF RISKY CUSTOMERS

Consumers who accept credit card offers are worse credit risks than consumers who do not, and consumers who accept credit card offers with higher interest rates are worse credit risks than consumers who accept better offers. According to research by University of Maryland Professor Lawrence Ausubel, consumers who accept worse offers turn out to have higher delinquency, charge-off, and bankruptcy rates. Professor Ausubel concludes that an "inferior offer yields inferior customers."

Similarly, an analysis of individual credit card issuers between 1990 and 1999 shows that banks that charge higher interest rates have higher delinquency rates. Banks with a 1 percent higher annual percentage rate of interest have estimated delinquency rates 16.5 percent higher than average. And even after controlling for interest rates, banks with higher annual fees or late fees still have higher delinquency rates. However, such an effect was not found for charge-off rates. Higher interest rates or fees are not associated with higher losses due to bad credit card debt written off.

This suggests that banks may profit from trying to attract risky customers. As banks raise their interest rates, some customers may switch to other issuers. Because switching may be easier for cardholders in good standing, those who remain are more likely to be behind on their payments and may end up generating higher income from interest and fees. This hypothesis is supported by my finding that net revenues (revenues minus net charge-offs) from credit cards were higher for banks that charged higher interest rates, minimum finance charges, and late fees. By contrast, raising the annual fee was estimated to lower net revenues. A high annual fee may chase off borrowers who do not intend to carry a balance, and the fee has been eliminated from many plans.

While a strategy of high rates and fees may make risky customers profitable in good times, there is no guarantee it will remain profitable when the economy softens. Both defaults and bankruptcies are likely to increase when GDP growth moderates and unemployment rises. Personal bankruptcies had already increased by 10 percent between January and November of 2000. Lending strategies that were profitable during a boom may have to be reevaluated in a recession.

Click here to view table
Bankruptcy Rates by Region

Joanna Stavins is an Economist at the Boston Fed. Her article, "Credit Card Borrowing, Delinquency, and Personal Bankruptcy," appeared in the July/August 2000 issue of the *New England Economic Review*.