FYI: An Update on Emerging Issues in Banking

Evaluating the Consumer Lending Revolution

September 17, 2003 (revised September 23, 2003)

Overview

Many of today's important macroeconomic questions revolve around the consumer. Consumer spending makes up around two-thirds of U.S. gross domestic product (GDP), and in recent years it has contributed an even higher portion to GDP growth because of weakness in business investment spending. However, despite strong growth in disposable incomes, consumer balance sheets have become stretched by large amounts of new consumer and mortgage debt—over $1.1 trillion in the last year and a half alone. This rapid increase in consumer spending and borrowing raises important questions about the sustainability of current debt loads and the vulnerability of the consumer sector to economic shocks. Ultimately, these concerns relate to the credit exposures of FDIC-insured institutions through some $2.6 trillion in consumer and mortgage loans held on their balance sheets.

Part of the difficulty in evaluating these trends arises because consumer spending and borrowing patterns during and after the 2001 recession departed significantly from historic norms.[1] U.S. households in 2002 continued to spend and borrow at a record pace even as personal bankruptcy filings reached record levels. While part of the recent climb in bankruptcy filings may be cyclical, some of the rise reflects unprecedented consumer credit availability. Innovations in consumer credit modeling, new pricing strategies for consumer loans, expanded funding options, and changes in regulations governing consumer lending have brought about a revolution in consumer lending and a new lending culture that provides consumers much greater access to credit and banking services. Appreciating the long-term implications of the emerging trends in consumer finances requires that they be analyzed in the context of the new lending environment.

Consumers Have Provided a Vital Source of Economic Strength

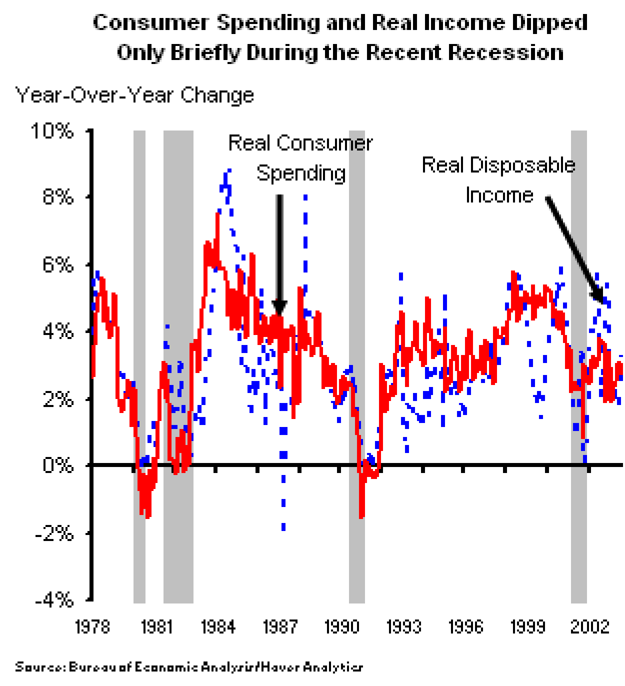
The structural changes in the lending markets have influenced consumer behavior through this economic cycle and have increased the sector's economic importance in recent quarters. Consumers behaved differently during the most recent recession than in previous downturns in part because the economic influences themselves have been atypical. Although faced with an unfavorable labor market and declines in financial asset values, fiscal and monetary policies have helped households maintain spending instead of retrenching. Indeed, throughout this cycle, consumers have been able to provide important support to the economy while business conditions remained weak. Consumer spending has contributed over 85 percent of economic growth since the end of the 2001 recession. Personal consumption expenditures increased year-over-year by 2.5 percent in 2001 and 3.1 percent in 2002, in sharp contrast to the 0.2 percent and 0.3 percent declines experienced during previous recessions in 1991 and 1980, respectively. Even the most cyclical components of consumer spending—residential investment and durable goods spending—broke traditional patterns and exhibited only mild slowdowns in recent quarters.

One reason why consumers were able to continue spending at this rate is that personal income growth remained strong throughout the recession, with real incomes climbing 4.3 percent last year (see Chart 1). Fiscal policies, including tax rebates, the extension of unemployment benefits and other transfer payments, proved more than enough to sustain incomes even as hourly wage and salary growth waned. Higher incomes, combined with low inflation, left consumer spending power largely intact.

Accommodative monetary policy also contributed to households continuing to spend instead of curtailing consumption. Monetary policy has benefited consumers by lowering interest rates, making debt increasingly affordable. The residential real estate market in particular has flourished in a record-low

interest rate environment. The rising homeownership rate and rapid appreciation in home values have fortified household balance sheets, and refinancing activity has further stimulated consumer spending. A recent study by the Federal Reserve found that close to one-half of all homeowners who refinanced during 2001 and early 2002 took cash out, with an average of $27,000 in equity liquefied.[2] Other homeowners reduced their interest rates and extended loan maturities, resulting in an average annual reduction in mortgage payments (net of taxes) of close to $300, even with higher principal balances in many cases.

Chart 1



Consumer Indebtedness is Cause for Concern Among Some Analysts

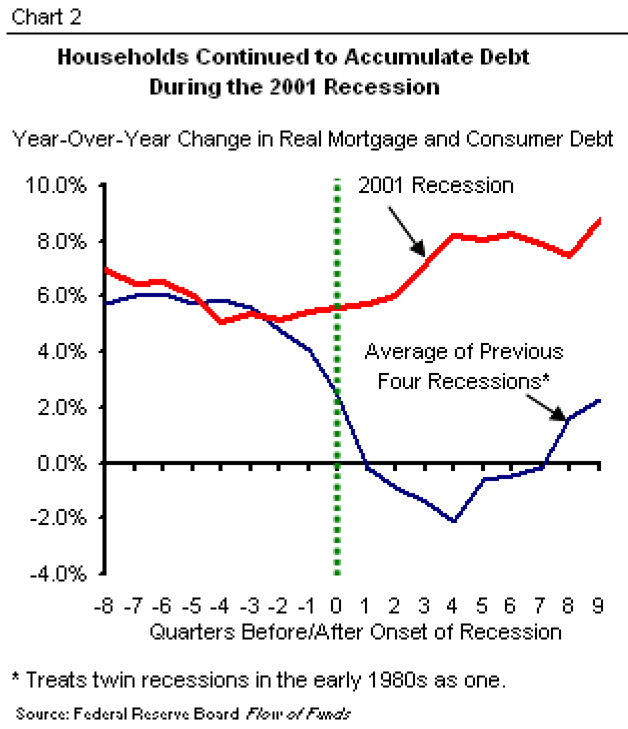
While continuous consumer consumption throughout the downturn stimulated much-needed economic growth, the rapid rise in debt that funded much of this consumption has led the sector into uncharted territory. Continued debt accumulation among households may challenge long-term debt service capacity. In 2002, U.S. households added nearly $725 in debt to their balance sheets, an increase of over 9 percent from 2001. Not since the late 1980s have consumers taken on debt at so quick a pace.

Almost 90 percent of this new debt has come from mortgage borrowing, which has been boosted not only by rising homeownership rates and well-known tax advantages, but also by attractive interest rates and widespread credit availability, which have endured through recent quarters. In fact, while mortgage liabilities outstanding grew by almost 12.5 percent last year, other consumer credit rose by only 3 percent. This disparity in growth rates suggests that many consumers have consolidated other forms of debt into lower-cost mortgage debt. Consumers rarely increase debt obligations so dramatically through a recession (see Chart 2).

Although credit has remained relatively inexpensive through the latest recession and into the recovery, the sheer volume of new debt is leaving consumers overall with persistently high debt payments as a percentage of income. While aggregate monthly debt costs have remained relatively steady for the past two years, and many borrowers have been able to refinance and restructure their debt so as to lower payments, many others have used low interest rates to escalate borrowing and increase both total

indebtedness and monthly obligations. Today the average household requires nearly 14 percent of its monthly income to service debt, up from 13.3 percent in early 1998. By comparison, during and immediately following the 1991 recession the household debt burden fell from over 13.5 percent to less than 12 percent.

At the same time that consumers have increased debt loads, their asset holdings have declined in value. Soaring real estate values only partially offset the effect of declining stock values, leaving household net worth $4.2 trillion lower at the end of 2002 than it was at the start of 2000. This increased leverage raises the possibility that consumer spending will not remain the leading driver of economic growth going forward.

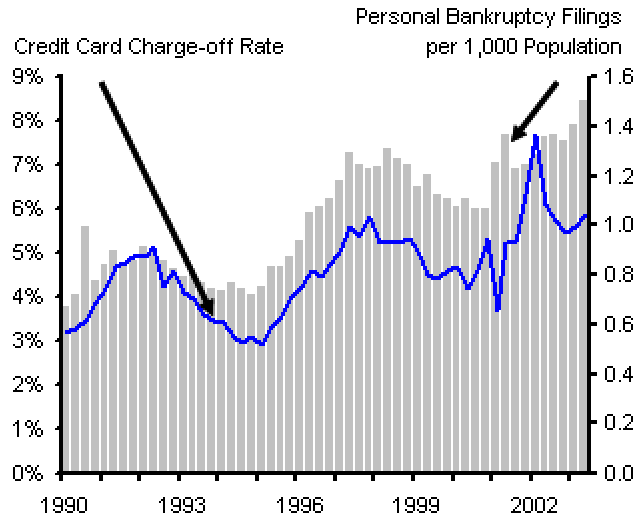


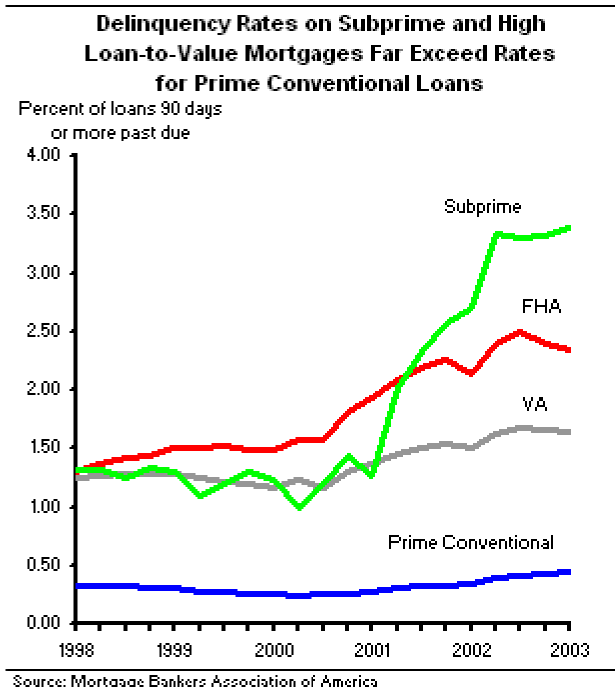
Can Consumers Continue to Support Economic Growth?

The unusual pattern of consumer spending and borrowing during and after the recent recession has led some experts to worry that consumers are overburdened. Under some of the more pessimistic scenarios, future economic growth could be stifled as consumers are forced to curtail spending to service debt. In addition, credit extended to weaker borrowers may continue to drive average delinquency and loss rates higher over time. These outcomes may be problematic for FDIC-insured institutions, which could suffer mounting loan losses, decreased loan growth, and, ultimately, weaker profitability from consumer lending activities.

Certain segments of the population are showing signs of financial vulnerability. Perhaps the most alarming statistic is the record 1.61 million personal bankruptcies that were filed in the 12 months ending in June 2003 (see Chart 3). Consumer and mortgage loan losses have risen in relation to the increase in bankruptcy filings. Credit card charge-offs at FDIC-insured institutions rose 33 percent in 2002 to an all-time high of 6.6 percent of average loan balances. Foreclosures of conventional mortgages reached an all-time high of 0.27 percent in the first quarter of 2003, while the portion of subprime mortgages 90 days or more past due has tripled since the end of 2001 to 3.74 percent.[3] (See Chart 4).

The implication of these trends depends on how much they can be attributed to the business cycle versus longer-term changes in consumer lending practices. In the section that follows, we argue that these trends can only properly be interpreted in light of a long-term “revolution” in consumer lending that has profoundly—and permanently—altered the patterns of consumer borrowing and credit quality across the business cycle.





Five Significant Trends Have Led to a "Revolution" in Consumer Lending

Five significant trends in consumer lending, some of which have been developing for years, coalesced during the 1990s to profoundly alter the consumer lending environment. These trends are: deregulation, general purpose credit cards, credit scoring, pricing according to risk, and securitization. Together, these trends have given consumers unprecedented command over economic resources. At the same time, these trends largely explain historic increases in personal bankruptcy filings and consumer loan losses in recent years. In order to benefit from this revolution while minimizing its downside, consumers, lenders, and policymakers must consider the factors that have contributed to these changes.

Deregulation. Many of the regulatory changes making the consumer lending revolution possible took place in the late 1970s and early 1980s in response to high and volatile nominal interest rates. The most important regulatory change for the consumer lending industry was the dismantling of state usury restrictions.[4] Although usury laws were firmly entrenched in the American financial system for much of the nation's history, the high inflation and soaring interest rates that took hold toward the end of the 1970s clarified how limiting an institution's pricing power could prove disadvantageous to both borrower and lender. Lender profitability suffered, and access to credit was restricted. In 1978, a Supreme Court ruling in the case of *Marquette National Bank of Minneapolis v. First Omaha Service Corp.* ("*Marquette*") led the way for removing interest rate restrictions by permitting rates to be governed by laws prevailing in the lender's home state, regardless of the residency of the borrower. As a result, many states relaxed interest rate restrictions to remain attractive to lenders, starting an important period of deregulation.

The trend toward deregulation continued in 1980, when the Depository Institutions Deregulation and Monetary Control Act eliminated state interest rate maximums for home mortgages and introduced the gradual phase-out of ceilings on deposit rate offerings. Eliminating deposit rate caps increased competition in banking and gave banks the ability to raise deposits in all credit environments.

General-Purpose Credit Cards. Credit card lenders were among the first to react to deregulated consumer interest rates and extend new offerings to consumers with potentially riskier profiles. Thus, the

credit card instrument itself can be considered another important element of the changing consumer credit landscape. The general-purpose credit card is novel in that it can be tapped at any time, for any purpose—an idea that is common today, but, at its introduction truly revolutionized consumer finance. Credit cards provide consumers with great flexibility and autonomy over their purchasing and borrowing decisions.

The growth in credit card lending that began with the *Marquette* decision continues today. There were 5 billion credit card solicitations by mail in 2001, nearly five times more than were sent in 1990 (see Chart 5). Concurrent with the proliferation of credit card offers, the percent of families holding bank credit cards increased across all income groups during the 1990s as families increasingly obtained access to unsecured, revolving credit lines. The increase was especially pronounced among lower income households. In 1998, 28 percent of families in the lowest income quintile had at least one bank credit card, up from 17 percent in 1989, while the percentage of households in the second income quintile that carried one or more bank credit cards climbed to 58 percent from 36 percent over the same period. Not surprisingly, increasing access to credit has brought about increased borrowing, a change that is again especially pronounced for families in lower income brackets. The percent of families in the lowest income quintile holding credit card debt doubled from 15 to 30 percent between 1989 and 2001, while households in the highest two income quintiles actually became less likely to carry outstanding balances (see Chart 6).

Chart 5

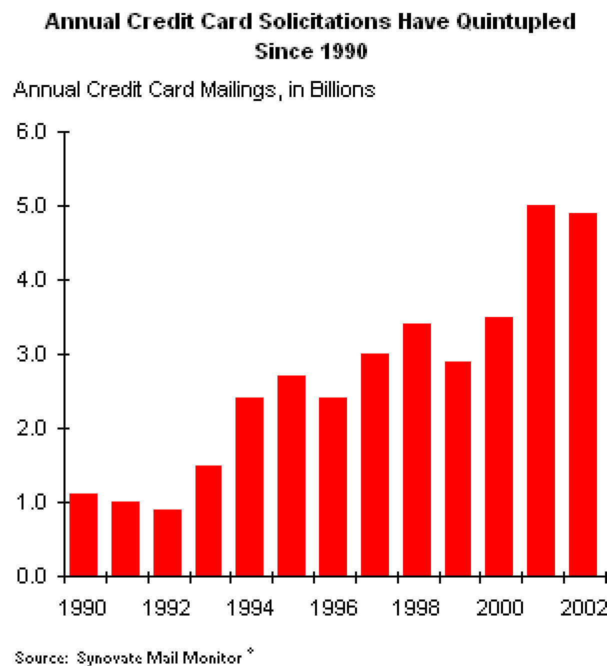
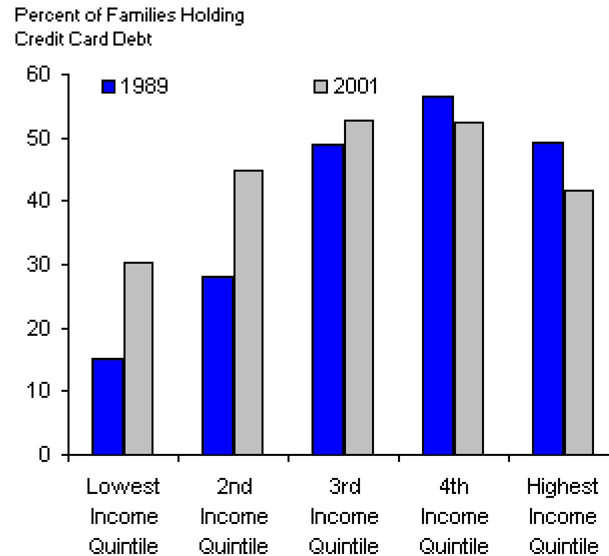


Chart 6



Source: Survey of Consumer Finances, Board of Governors of the Federal Reserve System

Credit Scoring. Although quantitative scoring of credit applications was introduced as far back as the 1950s, advances in communications and information technology made it possible to fully automate consumer loan underwriting for the first time in the 1990s. This technology is now widely used in making not only credit card loans, but also mortgage, home equity, auto, and other consumer loans. A credit score is designed to predict the likelihood that a borrower will repay a loan, based on historical outcomes of loans to borrowers with similar characteristics. While no model claims perfect predictive power, today's models demonstrate a high degree of correlation between predicted and actual loan performance. Strong modeling capabilities clearly improve the quality and flow of information between borrower and lender, and even to third parties, and therefore enhance market efficiency. Another benefit of credit scoring is quicker loan approval decisions. Quicker approvals reduce cost and increase productivity, as loan officers need only manually review cases that are less than clear-cut. Thus, widespread credit scoring has lowered the barriers to entry, enhanced competition among lenders, and encouraged increased lending.[5]

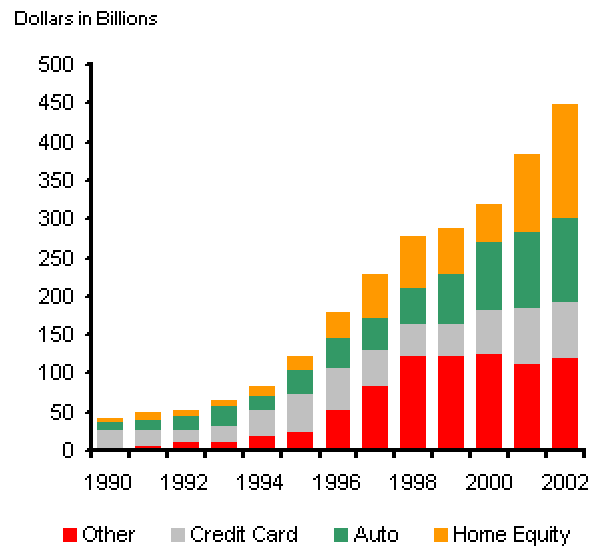
The 2001 recession offered the first test of new credit scoring technology during an economic downturn. For many lenders, the experience showed a troubling tendency for the models to under-predict credit losses.[6] This tendency was particularly pronounced for subprime lenders. The ability to accurately model credit losses is crucial to the profitability of consumer lenders in an environment where borrowers are cultivated all along the credit-quality spectrum. Lenders significantly overestimating credit performance have found themselves sustaining losses that have led to financial distress and even failure. Lenders with inaccurate models have had to reevaluate not only their models but also, in many cases, their marketing and lending strategies. Only by implementing models that provide a reliable estimate of credit losses at all points in the business cycle can consumer lenders ensure profitability over the longer term.

Risk-Based Pricing. With better consumer credit scoring comes an improved ability to estimate borrower risk and price loans accordingly. The deregulation and technological innovations discussed above gave lenders both the ability and impetus to develop and implement sophisticated risk-based pricing strategies. Now, loans to borrowers with riskier profiles can be priced profitably and lenders can be compensated for the added credit risk. By segmenting markets in this way, lenders reach more customers because lower-risk individuals are no longer required to pay unnecessarily higher rates to subsidize lending to riskier

borrowers.

Entire new lines of business, including subprime lending, have emerged as lenders have become better able to differentiate among loan applicants. Subprime lending has grown tremendously since the 1990s; FDIC insured institutions held nearly $54 billion in subprime assets in the last quarter of 2002, almost $25 billion more than were held just three years prior. Subprime mortgage loans alone have increased dramatically, rising more than six-fold from $35 billion to $213 billion in the 8 years between 1994 and 2002.[7]

Securitization. A final feature of the new lending culture is securitization, through which credit card advances, mortgages, and other receivables are packaged into special purpose trusts and financed through bonds sold to investors all around the world. Pooling loans in this way increases liquidity, facilitates stratifying risks, enhances the predictability of the underlying payment streams, and decreases funding costs. Although it began in the mortgage market, securitization has increased dramatically for other types of consumer loans in the past decade (see Chart 7). Significant growth in consumer loan securitization is closely related to the proliferation of credit scoring, which has provided the information necessary to structure and price securities. Securitization is a wholesale funding mechanism that is able to respond to rapidly increasing demand for consumer credit.



Consequences of the Consumer Lending Revolution

The aftermath of the consumer lending revolution is reverberating throughout the consumer sector and the financial services industry, to both positive and negative effect. A primary outcome is substantial widening of credit availability. Even households with low incomes, few assets, or blemished credit histories can now finance homes, cars, education, and other consumer goods through specialized lending programs, such as subprime or no-down-payment loans. Clearly, increased access to credit has made a difference to consumers. The percentage of households carrying any kind of debt increased in each of the three lowest income quintiles between 1998 and 2001.[8] Increases in home-secured debt and homeownership have been particularly marked; families with incomes below the national median have

achieved homeownership rates above 50 percent since the late 1990s. In turn, the increased flexibility of consumers to finance consumption may even smooth macroeconomic performance by stabilizing consumer spending and housing market activity across the business cycle.

Of course, increased credit availability has enticed consumers to accumulate debt and resulted in the higher debt loads carried by some households today. Moreover, increasing dissemination of credit to riskier borrowers has resulted in an increase in the average riskiness of consumer loan portfolios. This helps explain why even during the good economic conditions that prevailed for much of the last 15 years, bankruptcies trended higher.[9] Between 1992 and 2000, annual GDP growth averaged 3.6 percent and the unemployment rate dropped from 7.5 percent to just 4.0 percent. Over the same period, annual personal bankruptcy filings climbed nearly 38 percent. While traditional economic drivers continue to influence bankruptcy claims, the data now reflect important structural changes as well. Independent of cyclical swings in bankruptcies, a structural shift to a higher level of filings appears to have resulted from the increased availability of credit to debtors with higher risk profiles.[10]

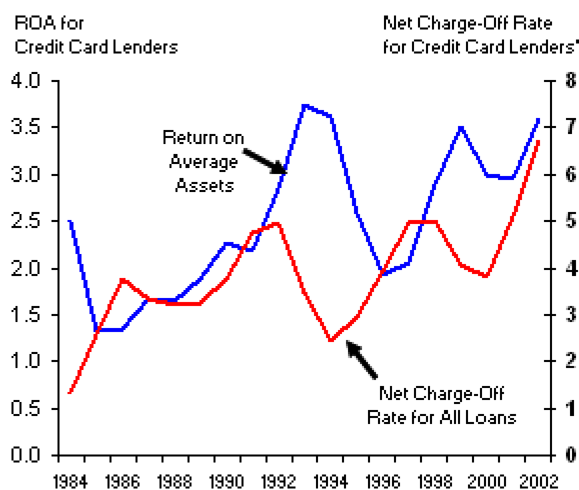
Similarly, certain credit quality performance measures have departed recently from following purely cyclical patterns. For instance, the marked increase through the 1990s in the percent of borrowers delinquent on any account (from 26 percent in 1992 to 34 percent in 1998) is another indication of how the consumer lending revolution is affecting loan performance.[11] The growth of credit availability, and resultant decline in average credit performance, is likely a permanent edifice of the new consumer lending environment that will continue to influence consumer sector economic data into the future.

Banks are Performing Successfully in the New Environment

The profitability of consumer and mortgage lenders in 2002 and the first half of 2003 speaks to the ability of banks to effectively manage both the cyclical and structural forces that are driving these business lines. Credit card institutions far outperformed the banking industry as a whole in 2002, earning a return on assets (ROA) of 3.60 percent, compared to the industry average of 1.31 percent (see Chart 8). The ROA of credit card lenders rose further in the first two quarters of 2003, to just over 4 percent in the second quarter. Although net charge offs on credit card loans jumped nearly 33 percent in 2002, lenders were able to maintain profitability in part because of high net interest margins and income from securitization activities and fees. Other consumer lenders performed similarly; charge-offs rose considerably last year, but ROAs were better than average at 1.35 percent. Mortgage lenders, too, have flourished. Although delinquencies and foreclosures have increased overall, mortgage specialists kept losses low in 2002, with charge offs declining by over 23 percent and ROAs rising to 1.32 percent.

Chart 8

In General, Credit Card Lenders Remain Highly Profitable Despite Increasing Loan Losses



* Credit card lenders are defined as institutions whose credit card loans plus securitized receivables exceed 50 percent of total assets plus securitized receivables.

These performance statistics help demonstrate that even high-risk, high-loss lending can be profitable when risk management techniques are employed and losses are anticipated. In fact, one lasting benefit of the new lending environment is that it has made creditors more proactive, challenging them to modify and improve risk models and better incorporate detailed credit reporting into risk management practices.

Conclusion

Recent developments in consumer finances are characterized by an unusual combination of hopeful and worrisome trends. Consumers remain the primary source of strength for the economy, but rising consumer indebtedness is a source of concern. The reasons for increased indebtedness and the types of debt being accumulated, however, make consumer obligations somewhat less worrisome than aggregate statistics might suggest. Notably, strong income growth and a robust housing market have supported borrowing. Most importantly, an evolving lending environment is precipitating widespread credit availability, and consumers today have access to new, innovative loan products. Thus, while high debt loads deserve attention, it can also be said that the accumulation of debt by consumers is a rational response to evolving credit conditions. With some exceptions, banks, too, have generally proven able to succeed given the new lending culture. Flaws in some subprime credit models may be leading certain lenders to underestimate credit weakness. But, overall, sound risk management practices have maintained solid bank performance.

The consumer lending revolution is here to stay. To continue to succeed, consumer lenders will need to continually update lending and risk management practices to stay current with the changes shaping their industry.

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[1] The FDIC hosted a roundtable on the consumer balance sheet on February 28, 2003 entitled “The US Consumer: How Much Debt is Too Much?” Participants examined current trends in consumer debt and wealth and assessed implications for future credit quality and financial performance of insured institutions.

Presenting at the roundtable were Richard A. Brown, Chief Economist at the FDIC, Karen Dynan, Senior Economist at the Federal Reserve Board, Michael Staten, Georgetown University Professor and Director of the Credit Research Center, and Ken Posner, Specialty Mortgage Finance Specialist at Morgan Stanley.

[2] Canner, Glenn, Karen Dynan, and Wayne Passmore. "Mortgage Refinancing in 2001 and Early 2002." *Federal Reserve Board Bulletin*, December 2002.

[3] Delinquency and foreclosure data are provided by the Mortgage Bankers Association of America. Subprime loans are generally defined as loans to borrowers who exhibit characteristics signifying a considerably higher risk of default than traditional bank lending customers.

[4] Ellis, Diane. "The Effect of Consumer Interest Rate Deregulation on Credit Card Volumes, Charge-Offs, and the Personal Bankruptcy Rate." FDIC *Bank Trends*, March 1998.

[5] Mester, Loretta J. "What's the Point of Credit Scoring?" Federal Reserve Bank of Philadelphia *Business Review*, September/October 1997.

[6] The Federal Reserve Board's January 2002 *Senior Loan Officer Opinion Survey on Bank Lending Practices* found that nearly 41 percent of subprime mortgage loan portfolios performed worse than their credit models had predicted. In addition, 56 percent of subprime credit card portfolios had larger than anticipated losses, as did 67 percent of other consumer loans. The number of standard prime portfolios that performed worse than expected was much smaller; 12 percent of mortgage portfolios, 33 percent of credit card portfolios, and 34 percent of other consumer credit portfolios had worse than predicted results.

[7] *Inside B&C Lending.* Volume 8, Issue 3. February 3, 2003.

[8] The 2001 Survey of Consumer Finances reveals that the percentage of families holding debt rose from 47.3 to 49.3 percent, 66.8 to 70.2 percent, and 79.9 to 82.1 percent for households in each of the bottom three income quintiles, respectively.

[9] Ellis (1998).

[10] See Ellis (1998) for an extensive discussion of the role played by enhanced credit availability and long-term increases in personal bankruptcy filings.

[11] Percent of borrowers 60 days or more past due on any type of account during the prior 4 years, TrenData™, TransUnion LLC.

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Last Updated 9/23/2003

Chart 1. Consumer Spending and Real Income Dipped Only Briefly During the Recent Recession		
	Year-Over-Year Change	
	Real Consumer Spending	**Real Disposable Income**
1978	2.64%	3.94%
	3.59%	5.55%
	4.54%	5.12%
	5.01%	5.75%
	5.18%	5.72%
	5.62%	5.33%
	4.33%	5.19%
	5.30%	5.21%
	4.78%	4.85%
	4.10%	4.64%
	3.84%	4.12%
	4.26%	4.24%
1979	5.13%	4.96%
	4.17%	4.51%
	3.25%	3.90%
	2.04%	2.76%
	1.81%	2.70%
	1.64%	2.57%
	1.98%	2.62%
	2.16%	2.31%
	2.61%	1.91%
	2.16%	2.09%
	2.11%	2.17%
	1.22%	2.03%
1980	2.32%	2.49%
	0.91%	1.75%
	-0.04%	0.55%
	-0.71%	0.43%
	-1.42%	-0.11%
	-1.18%	0.10%
	-0.24%	0.16%
	-1.24%	-0.02%
	-1.56%	0.57%
	-0.11%	1.12%

	-0.72%	1.16%
	0.24%	1.49%
1981	-0.49%	0.58%
	0.16%	0.70%
	1.33%	1.59%
	2.28%	1.74%
	2.85%	2.42%
	3.10%	2.85%
	2.03%	3.80%
	2.57%	4.15%
	1.94%	3.55%
	0.20%	2.67%
	0.24%	2.14%
	0.10%	1.15%
1982	-0.22%	1.15%
	0.86%	1.69%
	0.41%	1.68%
	0.80%	3.26%
	1.06%	2.84%
	-0.19%	1.60%
	0.61%	0.81%
	0.03%	0.43%
	1.60%	0.55%
	2.58%	0.28%
	3.65%	0.74%
	3.49%	1.30%
1983	3.79%	1.60%
	2.84%	1.49%
	4.08%	1.83%
	4.70%	1.02%
	5.02%	1.71%
	6.58%	2.53%
	6.59%	3.21%
	6.69%	3.01%
	5.97%	3.98%
	6.46%	4.84%
	5.94%	5.24%
	6.75%	5.97%

1984	7.57%	6.46%
	6.16%	7.27%
	5.89%	7.55%
	5.88%	8.30%
	5.85%	8.12%
	5.60%	8.82%
	4.49%	7.71%
	4.76%	8.83%
	5.28%	8.67%
	4.07%	7.06%
	5.26%	6.88%
	4.11%	6.70%
1985	4.07%	6.16%
	5.90%	4.35%
	4.88%	3.02%
	4.51%	4.05%
	5.12%	6.21%
	3.87%	3.11%
	5.03%	2.77%
	5.61%	2.05%
	6.38%	1.39%
	5.10%	2.88%
	3.94%	2.14%
	5.02%	2.14%
1986	4.28%	2.08%
	3.65%	3.62%
	4.14%	5.30%
	4.48%	3.54%
	3.89%	1.29%
	4.21%	3.49%
	4.20%	3.70%
	3.69%	3.72%
	4.45%	3.72%
	4.52%	2.74%
	3.86%	2.85%
	4.97%	2.35%
1987	2.34%	2.82%
	4.43%	2.81%

	4.12%	1.96%
	3.98%	-2.14%
	3.42%	1.82%
	4.08%	1.86%
	3.88%	1.83%
	4.20%	2.19%
	1.46%	2.14%
	2.90%	3.03%
	3.30%	3.37%
	1.87%	3.93%
1988	5.31%	3.60%
	3.53%	3.59%
	4.38%	3.81%
	3.45%	8.05%
	4.03%	4.00%
	3.87%	4.43%
	3.63%	4.48%
	3.31%	4.24%
	3.52%	4.39%
	4.46%	4.22%
	4.61%	4.10%
	4.37%	4.04%
1989	3.57%	4.09%
	3.28%	3.65%
	2.32%	3.65%
	3.32%	3.18%
	2.57%	2.60%
	2.43%	2.56%
	2.47%	2.22%
	3.00%	2.18%
	3.05%	1.90%
	2.09%	1.54%
	1.89%	1.95%
	2.10%	1.30%
1990	2.57%	1.96%
	2.25%	2.24%
	2.67%	1.80%
	2.30%	2.74%

	2.33%	2.86%
	2.51%	2.71%
	2.43%	3.03%
	1.48%	2.40%
	1.68%	2.53%
	1.09%	1.69%
	0.98%	1.12%
	-0.15%	1.27%
1991	-1.54%	0.04%
	-0.55%	-0.19%
	0.19%	0.03%
	-0.31%	-0.16%
	0.03%	0.11%
	-0.31%	0.46%
	-0.10%	-0.13%
	-0.34%	0.38%
	-0.32%	0.51%
	-0.11%	0.96%
	0.43%	1.03%
	0.83%	1.49%
1992	3.07%	2.65%
	2.56%	2.92%
	1.63%	2.78%
	1.94%	2.71%
	2.17%	3.02%
	2.38%	2.56%
	2.28%	2.60%
	2.12%	2.44%
	3.38%	2.62%
	4.22%	3.47%
	3.97%	3.50%
	4.62%	5.93%
1993	3.01%	1.29%
	3.19%	0.79%
	2.39%	0.39%
	3.51%	1.78%
	3.12%	1.69%
	3.54%	1.53%

	3.73%	1.62%
	4.30%	2.08%
	3.47%	1.67%
	3.40%	1.19%
	3.47%	1.33%
	3.19%	1.31%
1994	3.00%	1.09%
	4.26%	2.35%
	5.04%	3.05%
	4.00%	1.51%
	4.03%	2.75%
	3.80%	2.72%
	3.26%	2.84%
	3.78%	2.69%
	3.49%	3.26%
	3.68%	4.00%
	3.62%	3.72%
	3.36%	1.05%
1995	4.12%	5.15%
	2.20%	3.88%
	2.63%	3.57%
	2.46%	2.63%
	3.20%	2.08%
	3.61%	2.42%
	3.18%	2.48%
	3.32%	2.32%
	2.88%	2.15%
	2.22%	1.50%
	2.80%	1.85%
	3.30%	1.67%
1996	2.56%	1.42%
	3.83%	2.10%
	3.35%	2.29%
	4.11%	2.24%
	3.39%	2.54%
	2.59%	2.86%
	3.17%	2.76%
	2.79%	3.04%

	3.16%	3.01%
	3.61%	2.62%
	2.94%	2.51%
	2.79%	2.63%
1997	3.80%	2.90%
	3.17%	2.45%
	3.25%	2.65%
	2.74%	3.72%
	2.47%	2.84%
	3.17%	2.58%
	4.14%	2.83%
	3.87%	3.00%
	3.85%	2.97%
	3.89%	3.59%
	4.17%	3.88%
	4.15%	3.92%
1998	3.66%	4.58%
	4.32%	5.14%
	4.67%	5.49%
	4.62%	5.62%
	5.78%	5.68%
	5.48%	5.84%
	4.32%	5.81%
	4.52%	5.58%
	4.99%	5.59%
	5.01%	5.33%
	4.92%	5.06%
	5.19%	4.70%
1999	4.94%	4.28%
	4.83%	3.67%
	5.03%	3.13%
	5.37%	2.57%
	4.39%	2.38%
	4.69%	2.23%
	5.12%	1.93%
	5.11%	2.20%
	4.80%	1.43%
	4.84%	2.00%

	4.74%	2.36%
	5.40%	2.98%
2000	5.22%	3.69%
	5.26%	3.84%
	4.92%	4.01%
	4.43%	4.61%
	4.70%	5.04%
	4.29%	4.95%
	4.15%	5.54%
	4.06%	5.29%
	4.62%	5.87%
	3.98%	5.36%
	3.72%	4.75%
	2.94%	4.28%
2001	3.56%	3.00%
	2.71%	2.62%
	2.23%	2.38%
	2.51%	2.03%
	2.46%	1.05%
	2.29%	0.88%
	2.32%	2.02%
	2.31%	3.51%
	0.85%	2.88%
	3.08%	0.09%
	2.78%	0.24%
	2.50%	0.70%
2002	2.45%	3.51%
	3.16%	3.99%
	3.30%	3.99%
	3.13%	4.09%
	2.92%	5.05%
	3.14%	5.75%
	3.86%	3.72%
	3.65%	2.02%
	3.74%	2.75%
	1.93%	5.29%
	2.71%	5.37%
	3.43%	5.09%

2003	2.97%	2.77%
	1.90%	2.19%
	2.37%	1.87%
	2.55%	2.25%
	3.08%	2.16%
	3.13%	1.61%
	2.75%	3.27%

Source: Bureau of Economic Analysis/Haver Analytics

Chart 2. Households Continued to Accumulate Debt During the 2001 Recession		
	Year-Over-Year Change in Real Mortgage and Consumer Debt	
Quarters Before/After Onset of Recession	**Average of Previous Four Recessions***	**2001 Recession**
-8	5.77%	7.00%
-7	6.03%	6.44%
-6	6.07%	6.55%
-5	5.77%	6.07%
-4	5.91%	5.08%
-3	5.57%	5.36%
-2	4.77%	5.19%
-1	4.05%	5.46%
0	2.40%	5.63%
1	-0.14%	5.77%
2	-0.89%	6.05%
3	-1.40%	7.17%
4	-2.12%	8.18%
5	-0.60%	8.03%
6	-0.49%	8.27%
7	-0.15%	7.89%
8	1.65%	7.45%
9	2.25%	8.78%

* Treats twin recessions in the early 1980s as one.

Source: Federal Reserve Board *Flow of Funds*

Chart 3. Credit Card Chargeoff Rates Have Moved Higher With Record Personal Bankruptcy Filings

	Credit Card Charge-off Rate	**Personal Bankruptcy Filings per 1,000 Population**
1989	3.12%	0.58
	3.22%	0.64
	3.04%	0.62
	3.33%	0.65
1990	3.19%	0.67
	3.28%	0.72
	3.46%	0.99
	3.88%	0.78
1991	4.20%	0.84
	4.69%	0.90
	4.76%	0.85
	4.94%	0.86
1992	4.89%	0.91
	5.13%	0.91
	4.24%	0.86
	4.58%	0.83
1993	4.10%	0.79
	3.94%	0.82
	3.61%	0.77
	3.46%	0.74
1994	3.39%	0.73
	3.08%	0.77
	2.94%	0.74
	3.10%	0.72
1995	2.92%	0.75
	3.34%	0.83
	3.56%	0.83
	4.01%	0.87
1996	4.22%	0.94
	4.60%	1.05
	4.47%	1.08
	4.73%	1.11
1997	5.02%	1.18
	5.57%	1.30
	5.35%	1.25
	5.83%	1.23
1998	5.25%	1.24

	5.23%	1.31
	5.24%	1.27
	5.31%	1.24
1999	5.06%	1.15
	4.51%	1.20
	4.42%	1.13
	4.61%	1.11
2000	4.67%	1.07
	4.18%	1.11
	4.58%	1.07
	5.34%	1.07
2001	3.68%	1.25
	5.22%	1.37
	5.22%	1.23
	6.34%	1.25
2002	7.67%	1.28
	6.07%	1.36
	5.71%	1.36
	5.44%	1.34
2003	5.58%	1.41
	5.88%	1.50

Source: Administrative Office of the U.S. Courts; U.S. Census Bureau; Federal Reserve Board (Haver Analytics)

Chart 4. Delinquency Rates on Subprime and High Loan-to-Value Mortgages Far Exceed Rates for Prime Conventional Loans

Percent of loans 90 days or more past due

	Subprime	FHA	VA	Prime Conventional
1998	1.31	1.30	1.25	0.33
	1.32	1.37	1.26	0.32
	1.25	1.42	1.29	0.32
	1.34	1.44	1.28	0.30
1999	1.30	1.50	1.28	0.30
	1.10	1.50	1.24	0.27
	1.20	1.52	1.22	0.27
	1.30	1.48	1.19	0.25
2000	1.23	1.48	1.17	0.25

	0.99	1.57	1.23	0.24
	1.19	1.57	1.16	0.25
	1.43	1.81	1.30	0.26
2001	1.26	1.94	1.36	0.28
	2.02	2.09	1.45	0.30
	2.32	2.19	1.51	0.32
	2.57	2.25	1.54	0.33
2002	2.70	2.14	1.50	0.35
	3.33	2.40	1.62	0.40
	3.30	2.50	1.67	0.41
	3.31	2.39	1.65	0.43
2003	3.38	2.34	1.64	0.44

Source: Mortgage Bankers Association of America

Chart 5. Annual Credit Card Solicitations Have Quintupled Since 1990

Year	Annual Credit Card Mailings, in Billions
1990	1.1
1991	1.0
1992	0.9
1993	1.5
1994	2.4
1995	2.7
1996	2.4
1997	3.0
1998	3.4
1999	2.9
2000	3.5
2001	5.0
2002	4.9

Source: Synovate Mail Monitor ®