

The Profitability of Credit Card Operations of Depository Institutions

An Annual Report by the Board of Governors of the Federal Reserve System, submitted to the Congress pursuant to Section 8 of the Fair Credit and Charge Card Disclosure Act of 1988.

June 2003

Section 8 of the Fair Credit and Charge Card Disclosure Act of 1988 directs the Federal Reserve Board to transmit annually to the Congress a report about the profitability of credit card operations of depository institutions.¹ This is the thirteenth report. The analysis here is based to a great extent on information from the Consolidated Reports of Condition and Income (Call Report) and two Federal Reserve surveys, the Quarterly Report of Credit Card Interest Rates and the Survey of Terms of Credit Card Plans.

Call Report Data

Every insured commercial bank files a Call Report each quarter with its federal supervisory agency. The Call Report provides a comprehensive balance sheet and income statement for each bank; however, it does not allocate all expenses or attribute all revenues to specific product lines, such as credit cards. Nevertheless, the data may be used to assess the profitability of credit card activities by analyzing the earnings of those banks established primarily to issue and service credit card accounts. These specialized banks are referred to here as "credit card banks."

For purposes of this report, credit card banks are defined by two criteria: (1) the bulk of their assets are loans to individuals (consumer lending), and (2) 90 percent or more of their consumer lending involves credit cards or related plans. Given this definition, it can reasonably be assumed that the profitability of these banks primarily reflects returns from their credit card operations.

The first credit card banks were chartered in the early 1980s, and the vast majority have been in operation only since the mid-1980s. To provide a more reliable picture of the year-to-year changes in the profitability of the credit card operations of card issuers, this report limits its focus to credit card banks having at least \$200 million in assets. Most of these institutions have been in continuous operation for several years, particularly those with assets exceeding \$1 billion, and are well beyond the initial phase of their operations.

As of December 31, 2002, twenty-five banks with assets exceeding \$200 million met the definition of a credit card bank. At that time, these banks accounted for approximately 68 percent of outstanding credit card balances on the books of commercial banks or in pools underlying securities backed by credit cards.

In 2002, credit card banks with assets in excess of \$200 million reported net earnings before taxes of 3.28 percent of outstanding balances adjusted for credit card-backed securitization.² As table 1 shows, returns for large credit card banks increased 4 basis points or

1. P.L. 100-583, 102 Stat. 2960 (1988). The 2000 report covering 1999 data was not prepared as a consequence of the Federal Reports Elimination and Sunset Act. The report was subsequently reinstated by law.

2. Calculations are adjusted for securitizations because earnings as reported on the Call Report reflect

1.2 percent from 2001. Returns on credit card operations have been relatively stable over the past four years and compare favorably over this period with returns during the mid-1990s. However, returns on credit card operations remain well below their high point attained in 1993.

1 Net before-tax earnings as percentage of outstanding balances for large credit card banks (adjusted for credit card securitizations), 1986-2002¹

<i>Year</i>	<i>Earnings²</i>	<i>Year</i>	<i>Earnings</i>
1986	3.45	1994	3.98
1987	3.33	1995	2.71
1988	2.78	1996	2.14
1989	2.83	1997	2.13
1990	3.10	1998	2.87
1991	2.57	1999	3.34
1992	3.13	2000	3.14
1993	4.06	2001	3.24
		2002	3.28

1. Large credit card banks are defined as commercial banks that have assets greater than \$200 million, have the bulk of their assets in loans to individuals (consumer lending), and have 90 percent of their consumer lending in credit cards and related plans. For credit card banks, outstanding balances are adjusted to include balances underlying credit card securities. Outstanding balances reflect an average of the four quarters for each year.
2. Figures may differ from those presented in prior year reports as the result of revisions to the Reports of Condition and Income.

Source: Reports of Condition and Income, 1986-2002, and data on securitizations.

Although profitability has fallen substantially since 1993 for the large credit card banks, credit card earnings continue to compare favorably to returns on all commercial bank activities.³

revenues and expenses from outstandings both on the books of the institutions and in off-balance-sheet pools backing securities.

A few institutions experienced substantial declines in profitability from 2001 to 2002 due, in part, to sharply increased credit losses. Further, one smaller institution included in the 2001 panel failed in 2002 and so it was not included in this report. Inclusion of this institution likely would not have affected the overall profitability level very much because of the small size of the institution relative to many of the others included in the 2002 estimates.

3. This report focuses on the profitability of large credit card banks, although many other banks engage in credit card lending without specializing in this activity. Reliable information on the profitability of the credit card activities of these other banks is not available, although their cost structures, pricing behavior,

For all commercial banks, the average return on all assets, before taxes and extraordinary items, was 1.98 percent in 2002.⁴

One difficulty that arises in assessing changes in profitability over time is that the sample of credit card banks changes somewhat from one year to the next. Thus, overall changes in profit rates from year to year reflect both real changes in activity and changes in the sample. To evaluate the effects of sample changes, the profitability of the specific banks included in the 2002 sample was examined over the period from 1986 to 2002 as well. Although the level of reported profitability for the constant panel of banks is somewhat different from that shown in table 1, the intertemporal pattern of profitability remains essentially as shown in the table. For 2002, returns for the constant sample increased 2.2 percent from the 2001 level.

Changes from 2001 in overall returns to credit card operations can be better understood by reviewing how individual expense and revenue items changed.⁵ As in 2001, credit quality problems continued to put pressure on credit card earnings in 2002. Charge-offs rose substantially, some 41 basis points, or 17 percent, from their 2001 level, and provisions for future losses as a percent of assets increased 2 percent from their 2001 level. Although provisions for future losses were higher in 2002 than in 2001, the increase was modest, suggesting that banks are anticipating credit quality problems may have stabilized.

At the same time that charge-offs and provisions for future losses were increasing for large credit card banks, overall expenses per dollar of assets declined. Reflecting favorable trends in market interest rates, interest expenses fell 41 percent from 2001. Noninterest expenses also fell, but only by a more modest 11 percent. On the revenue side of the income statement, interest income as a percent of assets declined from the 2001 level by 15 percent. Further offsetting some of the beneficial effects of lower funding costs, income derived from noninterest sources such as fees, merchant discounts, and credit card securitizations fell about 6 percent.

and consequently their profitability may differ from that of the large, specialized issuers. The relatively high returns of credit card banks are not surprising, since one would expect that monoline institutions or those focused heavily on only one activity, such as credit card banks, would need to earn higher returns to compensate for the greater risks of holding an undiversified (by credit line) portfolio.

In earlier annual reports on credit card profitability, information from the Federal Reserve's Functional Cost Analysis (FCA) Program was used to measure the profitability of the credit card activities of smaller credit card issuers. These data tended to show credit card activities were less profitable for smaller issuers than for larger ones. The FCA program was discontinued in the year 2000. For further discussion, see Glenn B. Canner and Charles A. Lueckert, "Developments in the Pricing of Credit Card Services," *Federal Reserve Bulletin*, vol. 78, no. 9 (September 1992), pp. 652-666.

4. See Mark Carlson and Roberto Perli, "Profits and Balance Sheet Developments at U.S. Commercial Banks in 2002," *Federal Reserve Bulletin*, vol. 89, no. 6 (June 2003).

5. For another assessment of changes in credit card revenues and expenses, see James J. Daly, "Issuers Shed Some Profitability," *Credit Card Management*, May 2003, pp. 34-36.

General Discussion

Thousands of firms offer bank cards to consumers.⁶ Prior to the early 1990s, card issuers competed primarily by waiving annual fees and providing credit card program enhancements. Since then, however, interest-rate competition has played a much more prominent role. Many credit card issuers, including nearly all of the largest issuers, have lowered interest rates on many of their accounts below the 18 to 19 percent levels commonly maintained through most of the 1980s and early 1990s. Credit card interest rates in general have become more responsive to issuers' costs of funds in recent years as more issuers have tied their interest rates directly to one of several indexes that move with market rates. (Currently, more than half of card issuers tie their interest rates on their largest credit card plans to a market index.) Some issuers have segmented their cardholder bases according to risk characteristics, offering reduced rates to existing customers who have good payment records while imposing relatively high rates on higher-risk or late-paying cardholders. Moreover, many issuers have attempted to gain or maintain market share by offering very low, temporary rates on balances rolled over from competing firms. Trends in credit card pricing are discussed in more detail below.

Over the past several years, competition has led to substantial shifts in market shares among the industry's largest firms. Most of the larger issuers have grown by acquiring credit card portfolios from smaller issuers or by merging with other firms. In addition, several of the more rapidly growing firms in recent years appear to have attracted market share by offering comparatively low-rate cards and attractive balance transfer programs. Others have gained market share through co-branding and associated rebate strategies, typically combined with waivers of annual fees.⁷

Aggressive competition for new customers during 2002 was at least partly the cause of a 7 percent increase from 2001 in the number of VISA and MasterCard in circulation, to a total of 525.3 million.⁸ The number of credit cards per cardholder also increased, rising about 4 percent to an estimated 4.7 credit cards per person. The large number of direct mail solicitations, down slightly from 2001 levels, demonstrates the continuing desire of card issuers to expand and retain

6. Currently, over 6,000 depository institutions issue VISA and MasterCard credit cards and independently set the terms and conditions on their plans. Close to 10,000 other institutions act as agents for card-issuing institutions. In addition to the firms issuing cards through the VISA and MasterCard networks, two large nonbank firms, American Express Co. and Morgan Stanley Dean Witter and Co., issue independent general purpose credit cards to the public.

7. Under co-branding programs, the credit card bears the name of and is marketed to consumers of the co-branded product(s). Through use of the card, consumers typically accumulate "points" good for rebates on purchases of the co-branded product(s). One popular type of co-branding is with airline companies; in this case, "frequent-flier miles" are earned through credit card purchases.

8. Figures exclude other third party cards such as the Discover Card and American Express Optima card. Figures also exclude debit cards. Source: *The Nilson Report*, Issue 784, March 2003.

their base of cardholders.⁹ An industry source indicates that in 2002, 73 percent of US households received an average of 5 offers per month; in the fourth quarter more than half of all offers promoted a zero percent introductory rate on balance transfers.¹⁰ While credit card holding continued to grow from 2001 to 2002, the rate of growth has moderated, consistent with the view that the market is becoming relatively saturated.

Recent legal developments may bring pressure on profit margins in credit card operations in the future. In late April 2003, MasterCard International and Visa USA, the financial joint ventures that control the MasterCard and Visa credit card brand names, settled an antitrust suit brought by a consortium of retail stores. As part of the settlement, MasterCard International and Visa USA agreed to payments of about \$3 billion to the retailers, although these amounts will be paid over time from reserves of the joint venture companies. The settlement also involves technical changes to agreements for processing certain debit card transactions in ways that likely will result in lower revenues for institutions issuing debit cards with these brands, due both to agreed-to lower fees on some debit card transactions and to the routing of more debit transactions over competing networks with lower interchange fees. The impact of the settlement, which will not be final until later in 2003, will be felt more in later years and will affect individual institutions differently, depending on the importance of these debit transactions to their overall fee revenues. Some large institutions that do not offer debit cards widely may not be affected very much; others with extensive debit card operations may feel substantial impact in their overall card programs.

Future developments in the credit card industry may also be influenced importantly by possible changes in the rules established by Visa USA and MasterCard International regarding the ability of members to issue other cards. In October 2001, the United States District Court for the Southern District of New York ruled that card association rules that require participating members only to issue credit cards with the MasterCard or Visa brands are anticompetitive. The Court also granted a stay of the order until the appeals process has concluded. In May 2002,

MasterCard International and Visa USA submitted briefs to the US Court of Appeals for the Second Circuit asking that this decision be overturned. If not overturned, this decision would permit financial institutions issuing credit cards with the MasterCard or Visa brands also to issue cards with the American Express and Discover brands if they contract to do so.

9. An estimated 4.89 billion direct mail solicitations were sent by issuers during 2002, down slightly (2 percent) from about 5.0 billion in 2001. The response rate on credit card solicitations in 2002 was estimated to be 0.5 percent, down slightly from 0.6 percent in 2001, but down sharply from an average of 2.4 percent over the period 1990 to 1993. Source: "Credit Card Mail Volume Drops in 2002 Due to Flat Economy and Worries About Impending War," Synovate, press release, June 2003.

10. Ibid.

Recent Trends in Credit Card Pricing

Aside from questions about the profitability of credit card operations, considerable attention has been focused on credit card pricing and how it has changed in recent years. Analysis of the trends in credit card pricing in this report focuses on credit card interest rates because they are the most important component of the pricing of credit card services. Credit card pricing, however, involves other elements, including annual fees, fees for cash advances, rebates, minimum finance charges, over-the-limit fees, and late payment charges.¹¹ In addition, the length of the "interest-free" grace period, if any, can have an important influence on the amount of interest consumers pay when they use credit cards to generate revolving credit.

Over the past several years, pricing practices in the credit card market have changed significantly. Many card issuers that in the past offered programs with a single interest rate now offer a broad range of card plans with differing rates depending on credit risk and consumer usage patterns. Moreover, as noted, many issuers have also moved to variable-rate pricing that ties movements in their interest rates to a specified index such as the prime rate.

At present, the Federal Reserve collects information on credit card pricing through two surveys of credit card issuers. Because of the significant changes in the pricing of credit card services, the Federal Reserve initiated the Quarterly Report of Credit Card Interest Rates (FR 2835a) at the end of 1994. This survey collects information from a sample of credit card issuers on (1) the average nominal interest rate and (2) the average computed interest rate. The former is the simple average interest rate across all accounts; the latter is the average interest rate paid by those card users who incur finance charges. These two measures can differ because some cardholders are convenience users who pay off their balances during the interest-free grace period and therefore do not typically incur finance charges. Together, these two interest rate series provide a measure of credit card pricing. The Federal Reserve also collects detailed information on the pricing features of the largest credit card plan of a sample of issuers through the Survey of Terms of Credit Card Plans (FR 2572).¹²

Because information from the FR 2835a survey does not have an extended historical interest rate series for comparison purposes, this report on credit card profitability also presents

11. In June 1996, the Supreme Court ruled that states may not regulate the fees charged by out-of-state credit card issuers. States have not been permitted to regulate the interest rates out-of-state banks charge. In making its decision, the Court supported the position previously adopted by the Comptroller of the Currency that a wide variety of bank charges, such as late fees, membership fees, and over-the-limit fees, are to be considered interest payments for this purpose. This ruling will likely ensure that banks will continue to price credit cards in multidimensional ways rather than pricing exclusively through interest rates. Source: Valerie Block, "Supreme Court Upholds Nationwide Card Charges," *American Banker*, June 4, 1996.

12. The information in the FR 2572 survey is published twice a year by the Federal Reserve. Historically, the data were made available in a statistical release, the E.5 "Report of the Terms of Credit Card Plans." Beginning in 1995, the E.5 statistical release was discontinued and data are now included in a consumer brochure, entitled "Shop: The Card You Pick Can Save You Money."

data from the survey that preceded and was replaced by the FR 2835a, the Federal Reserve's Quarterly Report of Interest Rates on Selected Direct Consumer Installment Loans (FR 2835). Data from the FR 2835 indicate that credit card interest rates fell sharply from mid-1991 through early 1994 after being relatively stable for most of the previous twenty years (table 2).¹³ Since early 1997, credit card interest rates have fluctuated between 12.78 and 15.85 percent. For 2002, credit card interest rates averaged 13.09 percent, the fourth consecutive year such rates have averaged below 15 percent. It should be emphasized that the interest rates reported after August 1994 are based on the new survey and are not strictly comparable to the interest rates reported on the older survey.

The general decline in credit card interest rates from mid-1991 is the result of many factors, including greater competition on this aspect of credit card pricing. The decline in rates also reflects, in large measure, the sharp drop in credit card issuers' costs of funds during this period. Reflecting movements in short-term interest rates for the year 2002, issuers' costs of funds moved down sharply from 2001 levels (see earlier discussion on profitability).

Additional evidence on changes in credit card interest rates comes from the FR 2572. Although not precisely comparable from period-to-period because of changes in the sample of reporters, this statistical series reveals a general decline in credit card interest rates in recent years. For example, only 11 percent of the respondents reported interest rates below 16 percent on their largest credit card plan as of September 1991, but 80 percent did so as of January 2003 (the latest report available). In addition, the proportion of card issuers reporting that they utilize variable-rate pricing has also increased substantially since September 1991. As of September 1991, 23 percent of issuers used variable-rate pricing; as of 2003, the proportion was 53 percent. The widespread use of variable-rate pricing suggests credit card rates are likely to respond relatively quickly to changes in market interest rates in the future.

13. For a comprehensive discussion of the factors that account for the levels and changes in credit card interest rates see, Glenn B. Canner and Charles A. Lueckett, "Developments in the Pricing of Credit Card Services;" also U.S. General Accounting Office, *U.S. Credit Card Industry* (GAO/GGD-94-23, 1994).

2. Average Most Common Interest Rate on Credit Card Plans, 1974-August 1994, and the Interest Rate Assessed on Accounts Incurring Interest Charges, November 1994-2002*

Percent

<i>Year</i>	<i>Interest rate</i>	<i>Year</i>	<i>Interest rate</i>
1974	17.20	1997	February 15.13
1975	17.16		May 15.72
1976	17.05		August 15.79
1977	16.88		November 15.62
1978	17.03		
1979	17.03	1998	February 15.33
1980	17.31		May 15.62
1981	17.78		August 15.85
1982	18.51		November 15.72
1983	18.78		
1984	18.77	1999	February 14.73
1985	18.69		May 14.94
1986	18.26		August 14.79
1987	17.92		November 14.77
1988	17.78		
1989	18.02	2000	February 14.32
1990	18.17		May 14.74
1991	18.23		August 15.35
1992	17.78		November 15.23
1993	16.83		
1994	15.77	2001	February 14.61
1995	15.79		May 14.63
1996	15.50		August 14.64
1997	15.57		November 13.88
1998	15.59		
1999	14.81	2002	February 12.98
2000	14.91		May 13.34
2001	14.44		August 13.26
2002	13.09		November 12.78

*Prior to November 1994 interest rates were those reported in the Quarterly Report of Interest Rates on Selected Direct Installment Loans. Beginning in November 1994 interest rates are those reported on the Quarterly Report of Credit Card Interest Rates for those credit card holders incurring interest charges.

Source: Board of Governors of the Federal Reserve System
