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 2004

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 fourteenth 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, 2003, twenty-one banks with assets exceeding $200 million met the definition of a credit card bank. At that time, these banks accounted for approximately 67.5 percent of outstanding credit card balances on the books of commercial banks or in pools underlying securities backed by credit card balances.

In 2003, credit card banks with assets in excess of $200 million reported net earnings before taxes of 3.66 percent of outstanding balances adjusted for credit card-backed securitization.[2] As table 1 shows, returns for large credit card banks increased 38 basis points or

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

(continued...)

11.6 percent from 2002. Returns on credit card operations have been increasing over the past four years and compare favorably with returns experienced during the mid-1990s. Despite improved earnings in recent years, returns on credit card operations in 2003 remain 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), 1986-2003[1]

Year	*Earnings*[2]	*Year*	*Earnings*
1986	3.45	1995	2.71
1987	3.33	1996	2.14
1988	2.78	1997	2.13
1989	2.83	1998	2.87
1990	3.10	1999	3.34
1991	2.57	2000	3.14
1992	3.13	2001	3.24
1993	4.06	2002	3.28
1994	3.98	2003	3.66

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, 1986-2003, and data on securitizations.

Although profitability for the large credit card banks has risen and fallen over the years, credit card earnings have been consistently higher than returns on all commercial bank activities.[3] For example, for all commercial banks, the average return on all assets, before taxes

2. (...continued)
pools backing securities.

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, 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 (continued...)

and extraordinary items, was 2.05 percent in 2003, well below the returns on credit card activities in that year.[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 2003 sample was examined over the period from 1986 to 2003 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 2003, returns for the constant sample increased 13.7 percent from the 2002 level.

Changes from 2002 in overall returns to credit card operations can be better understood by reviewing how individual expense and revenue items changed.[5] Improvements in credit quality boosted returns in 2003. Charge-offs per dollar of assets fell substantially, some 43 basis points, or 16 percent, from their 2002 level, and provisions for future losses as a percent of assets declined 18 percent from their 2002 level.

At the same time that charge-offs and provisions for future losses were declining for large credit card banks, overall expenses per dollar of assets declined. Reflecting favorable trends in market interest rates, interest expenses fell 22 percent from 2002. Noninterest expenses also fell, but only by a more modest 3 percent. On the revenue side of the income statement, interest income as a percent of assets declined from the 2002 level by 9 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 1 percent.

General Discussion

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3. (...continued)
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. Luckett, "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 2003," *Federal Reserve Bulletin* (Spring quarter, 2004).

5. For another assessment of changes in credit card revenues and expenses, see James J. Daly, "Smooth Sailing," *Credit Card Management*, May 2004, pp. 31-34.

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 2003 was at least partly the cause of a 6 percent increase from 2002 in the number of VISA and MasterCards in circulation, to a total of 556.3 million.[8] The number of credit cards per cardholder also increased, rising about 2 percent to an estimated 4.8 credit cards per person. While credit card holding continued to grow from 2002 to 2003, the rate of growth has moderated, consistent with the view that the market is becoming relatively saturated.

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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 805, February 2004.

Direct mail solicitations continue to be the primary channel used for new account acquisition and account retention. The large number of direct mail solicitations in 2003, although down from historic highs reached in 2001 and 2002 demonstrates the continuing desire of card issuers to expand and retain their base of cardholders.[9] An industry source indicates that in 2003, 69 percent of US households received an average of 4.8 offers per month.[10] As in the recent past, credit card solicitations in 2003 heavily promoted low introductory interest rates for purchases and balance transfers. These solicitations are intended to generate new account relationships. However, many solicitations also focused on rewards, such as airline mileage credits and rebates. These solicitations are intended primarily to retain customer loyalty and fend off competition. In response to higher credit losses in recent years, mail solicitations in 2003 targeted to subprime prospects continued to fall from levels reached in 2001. In that year, 18 percent of all solicitations were targeted at individuals with subprime credit characteristics. In 2003, only 10 percent of all mail solicitations were targeted at such individuals.

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 was not final until late 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 greater impact in their overall card programs. Some observers contend that long-term impact of lower debit interchange fees on profitability of card operations as a whole will not be very great, as increases in volume offset somewhat lower debit interchange fees.

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.

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9. An estimated 4.29 billion direct mail solicitations were sent by issuers during 2003, down 12 percent from 4.89 billion in 2002. The response rate on credit card solicitations in 2003 was estimated to be 0.6 percent, up slightly from 0.5 percent in 2002, but down sharply from an average of 2.4 percent over the period 1990 to 1993. Source: "Behind 2003's Direct-Mail Numbers," *Credit Card Management*, April 2004, p. 20.

10. Ibid.

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 that 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 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

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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."

early 1994 after being relatively stable for most of the previous twenty years, and fell again over the 1998-2003 period (table 2).[13] Since early 1997, credit card interest rates have fluctuated between 12.78 and 15.85 percent. For 2003, credit card interest rates averaged 12.92 percent, the fifth 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 2003, issuers' costs of funds declined from 2002 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 82 percent did so as of January 2004 (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 January 2004, the proportion was 54 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. Luckett, "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 1994-2003*

Percent

Year	*Interest rate*	*Year*		*Interest rate*
1974	17.20	1998	February	15.33
1975	17.16		May	15.62
1976	17.05		August	15.85
1977	16.88		November	15.72
1978	17.03			
1979	17.03	1999	February	14.73
1980	17.31		May	14.94
1981	17.78		August	14.79
1982	18.51		November	14.77
1983	18.78			
1984	18.77	2000	February	14.32
1985	18.69		May	14.74
1986	18.26		August	15.35
1987	17.92		November	15.23
1988	17.78			
1989	18.02	2001	February	14.61
1990	18.17		May	14.63
1991	18.23		August	14.64
1992	17.78		November	13.88
1993	16.83			
1994	15.77	2002	February	12.98
1995	15.79		May	13.34
1996	15.50		August	13.26
1997	15.57		November	12.78
1998	15.59			
1999	14.81	2003	February	12.85
2000	14.91		May	12.82
2001	14.44		August	13.11
2002	13.09		November	12.91
2003	12.92			

*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