REPORT TO CONGRESS

Profitability of Credit Card Operations of Depository Institutions

July 2022

Overview

The Federal Reserve reports on the profitability of credit card operations of depository institutions, as directed by section 8 of the Fair Credit and Charge Card Disclosure Act of 1988.[1] This is the 32nd report. This report analyzes the profitability over time of credit card operations by examining the performance of institutions that specialize in such activities. This report also reviews trends in credit card pricing, including changes in interest rates. The analysis in this report is based to a great extent on information from the Consolidated Reports of Condition and Income (Call Reports) and the Quarterly Report of Credit Card Plans.[2]

This report contains the identification of credit card banks; an overview of credit card bank profitability; information on how consumers use credit cards; and an analysis of recent trends in credit card pricing.

Contents

Identification of Credit Card Banks

Every insured bank files a Call Report each quarter with its federal supervisory agency.[3] While the Call Report provides a comprehensive balance sheet and income statement for each bank, it does not allocate all expenses or attribute all revenues to specific product lines, such as credit card accounts. Thus, the data may be best used to assess the profitability of credit card activities by analyzing the earnings of only those banks established primarily to issue and service credit card accounts. These specialized, or monoline, banks are referred to here as “credit card banks.”

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[1] See Fair Credit and Charge Card Disclosure Act, Pub. L. No. 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] The data used in this report are as of December 31, 2021, and do not reflect economic and financial conditions since then. The Federal Reserve collects the data from the Quarterly Report of Credit Card Plans (form FR2835a).

[3] The sample of banks used for this report includes commercial banks, state savings banks, and thrifts.

For purposes of this report, credit card banks are defined by two criteria: (1) More than 50 percent 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.[4]

The first credit card banks were chartered in the early 1980s; few were in operation before the mid-1980s. To provide a 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 with at least $200 million in assets.

As of December 31, 2021, nine banks with assets exceeding $200 million met the definition of a credit card bank, and, at the time, these banks accounted for 36 percent of outstanding credit card balances on all banks' balance sheets.

Credit Card Bank Profitability

Tracking credit card profitability over time is complicated. The sample of credit card banks changes somewhat from one year to the next primarily because of changing bank loan portfolios and reorganizations. Thus, overall changes in profit rates from year to year can reflect both real changes in activity and changes in the sample. That said, changes in the sample from 2020 to 2021 had a negligible effect on the measures of profitability reported in tables 1 and 2.

Another difficulty that arises in assessing changes in the profitability of credit card activities over time is due to changes in accounting rules. For example, accounting rule changes implemented in 2010 required banking institutions to consolidate on their Call Reports some previously off-balance-sheet items (such as credit-card-backed securities). To the extent that previously off-balance-sheet assets have a different rate of return than on-balance-sheet assets, profitability measures based on Call Report data in 2010 and after are not necessarily comparable with those before 2010.

Similarly, large credit card banks that file with the Securities and Exchange Commission began using the current expected credit losses methodology (CECL) to estimate provisions for loan losses on January 1, 2020. CECL replaced the previously used incurred loss methodology and incorporates some forward-looking information in estimating expected credit losses.[5] Because of

[4] One bank (Discover Bank) included in the sample did not exactly meet these criteria. This bank is a major issuer on the Discover network, and its balance sheet is largely consistent with the credit-card-focused business model.

[5] For more information on CECL, see https://www.federalreserve.gov/supervisionreg/topics/faq-new-accounting-standards-on-financial-instruments-credit-losses.htm.

this change in methodology, starting in 2020, loan loss provisions are not necessarily comparable with those before 2020.

In 2021, credit card banks with assets in excess of $200 million reported net earnings, before taxes and extraordinary items, of 6.93 percent of average quarterly assets (table 1).

The large increase in profitability in 2021 reflected several changes in individual expense and revenue items (table 2). First, the majority of the increase resulted from changes in provisioning for loan losses. As discussed in the 2020 report, after drastically expanding provisioning at the early stages of the COVID-19 pandemic to prepare for large potential credit losses, banks shrank their provisioning toward the end of 2020 as anticipated losses did not materialize. That trend continued in 2021 as provisioning fell to a historically low rate and supported a strong rebound in profitability. Taken together, average profitability for the 2020–21 period was 4.67 percent, slightly above the average rate of profitability for the 2001–19 period of 4.25 percent.

Table 1. Annualized return on assets, large U.S. credit card banks, 2001–21
Percent

Year	Return
2001	4.83
2002	6.06
2003	6.73
2004	6.30
2005	4.40
2006	7.65
2007	5.08
2008	2.60
2009	–5.33
2010	2.41
2011	5.37
2012	4.80
2013	5.20
2014	4.94
2015	4.36
2016	4.04
2017	3.37
2018	3.79
2019	4.14
2020	2.40
2021	6.93

Note: Credit card banks are banks with average assets greater than or equal to $200 million, with a minimum 50 percent of assets in consumer lending and 90 percent of consumer lending in the form of revolving credit. Profitability of credit card banks is measured as net pretax income as a percentage of average quarterly assets.
Source: Federal Financial Institutions Examination Council, Consolidated Reports of Condition and Income (Call Reports), https://www.ffiec.gov.

Second, net interest income at large credit card banks inched up in 2021, as interest expenses contracted at a faster pace than did interest income. The increase in net interest income last year was offset by a decrease in net noninterest income stemming from an expansion of noninterest expenses that exceeded a rise in noninterest income. Last year's increases in both noninterest income and noninterest expenses are consistent with a rebound in credit card purchase volumes in 2021. The dollar volume of purchase transactions on credit cards rose approximately 26 percent in 2021, likely resulting in higher interchange income and higher rewards expenses at credit card banks.[6]

[6] As discussed in "Market Structure and Additional Background," this figure is from the *Nilson Report*. See HSN Consultants, Inc. (2022), *Nilson Report,* no. 2013 (Carpinteria, Calif.: The Nilson Report, February).

Table 2. Income and expenses for U.S. banks in 2020 and 2021
Percent of average quarterly assets

	Credit card banks in 2021	Credit card banks in 2020	All commercial banks in 2021
Total interest income	10.36	10.68	2.48
Total interest expenses	.93	1.45	.16
Net interest income	9.43	9.23	2.32
Total noninterest income	5.62	4.39	1.31
Total noninterest expenses	8.22	6.47	2.24
Net noninterest income	–2.60	–2.08	–.93
Provisions for loan losses	–.08	4.75	–.13
Return	6.93	2.40	1.54

Note: Credit card banks are banks with average assets greater than or equal to $200 million, with a minimum 50 percent of assets in consumer lending and 90 percent of consumer lending in the form of revolving credit.
Source: Federal Financial Institutions Examination Council, Consolidated Reports of Condition and Income (Call Reports), https://www.ffiec.gov.

Credit card earnings have almost always been higher than returns on all bank activities, and earnings patterns for 2021 were consistent with historical experience.[7] The average return on all assets, before taxes and extraordinary items, was 1.54 percent for all banks, compared with 6.93 percent for the sample of large credit card banks (as shown in table 2). Delinquency and charge-off rates for credit card loans across all banks fell in 2021 and continued to remain well below their historical average rates.[8]

Market Structure and Additional Background

Bank cards are widely held and extensively used by consumers. According to the Federal Reserve's Survey of Consumer Finances (SCF), almost 75 percent of families had at least one credit card in 2019, the most recent year for which survey results are currently available.[9] Consumers use credit cards for borrowing, as standby lines of credit for unforeseen expenses, and as a convenient payment device. As a source of credit, credit card users can borrow up to the credit limit on their account and revolve the balance by paying less than the full amount due.[10] As a con-

[7] 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. The profitability of the credit card activities of these other banks is difficult to discern. The cost structures, pricing behavior, cardholder profiles, and, consequently, profitability of these diversified institutions may differ from that of the large, specialized card issuers considered in this report.

[8] See Board of Governors of the Federal Reserve System (2022), Statistical Release, "Charge-Off and Delinquency Rates on Loans and Leases at Commercial Banks" (February 18), https://www.federalreserve.gov/releases/chargeoff/.

[9] This statistic reflects access to general-purpose credit cards and does not include retail cards or charge cards.

[10] Credit card borrowers must pay at least the minimum amount due each month to remain in good standing.

venient payment device, a portion of the outstanding balances reflects primarily "convenience use"—that is, balances consumers intend to repay within the standard "interest free" grace period offered by card issuers. In fact, consumer surveys, such as the SCF, typically find that more than half of cardholders report they nearly always repay their outstanding balance in full before incurring interest each month.[11]

The general-purpose bank credit card market in the United States is dominated by cards issued on the Visa and Mastercard networks, which, combined, accounted for nearly 642 million cards, or about 85 percent of general-purpose credit cards, in 2021.[12] In addition, the American Express and Discover networks accounted for another 117 million general-purpose cards in 2021. The combined total number of charges and cash advances using credit cards rose 21 percent to almost 49 billion transactions in 2021. The dollar volume of these transactions rose approximately 26 percent to more than $4.6 trillion.

A relatively small group of card issuers holds most of the outstanding credit card balances, with the top 10 holding 82 percent.[13] Several thousand other financial institutions offer credit cards to consumers but hold a small share of outstanding credit card balances.[14] In the aggregate, the Federal Reserve Statistical Release G.19, "Consumer Credit," indicates that consumers carried $1.04 trillion in outstanding balances on their revolving accounts as of the end of 2021, about $67 billion (7 percent) higher than the level at the end of 2020.

Based on data from consumers' credit records, the amount of available credit under outstanding credit card lines far exceeds the aggregate of balances owed on such accounts. Credit record data indicate that as of the end of 2021, individuals were using slightly more than one-fifth of the total dollar amount available on their lines under credit card plans.[15] Apart from a one-year decline in 2020, the total dollar amount available has risen each year since 2010 and exceeded $4 trillion at the end of 2021.

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[11] For a discussion of credit borrowing in 2019, see Neil Bhutta, Jesse Bricker, Andrew C. Chang, Lisa J. Dettling, Sarena Goodman, Joanne W. Hsu, Kevin B. Moore, Sarah Reber, Alice Henriques Volz, and Richard A. Windle (2020), "Changes in U.S. Family Finances from 2016 to 2019: Evidence from the Survey of Consumer Finances," *Federal Reserve Bulletin,* vol. 106 (September), pp. 1–42, https://www.federalreserve.gov/publications/files/scf20.pdf.

[12] Figures cited in this paragraph are from the *Nilson Report*. See HSN Consultants, *Nilson Report,* in note 6.

[13] Five of the top 10 card issuers are in the sample of credit card banks used in this report. The other 5 issuers do not meet the requirements for inclusion in the sample.

[14] Currently, depository institutions, including banks and credit unions, and a small number of finance companies and nonfinancial businesses, issue Visa and Mastercard credit cards and independently set the terms and conditions on their plans. Many other institutions act as agents for card-issuing institutions. In addition to the firms issuing cards through the Visa and Mastercard networks, a few institutions issue cards on the American Express and Discover networks. However, the vast majority of cards issued on the American Express and Discover networks are originated by direct subsidiaries.

[15] See Federal Reserve Bank of New York (2022), *Quarterly Report on Household Debt and Credit: 2021:Q4* (New York: FRBNY, February), https://www.newyorkfed.org/medialibrary/interactives/householdcredit/data/pdf/hhdc_2021q4.pdf.

In soliciting new accounts and managing existing account relationships, issuers segment their cardholder bases along a number of dimensions. For example, issuers offer more attractive rates to customers who have good payment records while charging relatively high interest rates and fees on higher-risk or late-paying cardholders. Card issuers also closely monitor payment behavior, charge volume, and account profitability, and they adjust credit limits accordingly both to allow increased borrowing capacity as warranted and to manage credit risk.

Various channels are used for new account acquisition and account retention.[16] The most important channel in recent years is generally referred to as the digital channel, which includes email solicitations, website advertisements, and social media advertisements. These solicitations could stem directly from the bank or from third-party firms. By the end of 2021, more than half of applied-for offers were received digitally. Branches, kiosks, and ATMs are other significant channels for account acquisition as banks take advantage of cross-selling opportunities. Finally, direct mailings continue to be an important channel, with about 3.2 billion offers mailed in 2021.[17] Approximately 16 percent of applied-for offers were obtained by direct mail at the end of 2021.

In recent years, several new trends related to credit card usage have emerged. First, some borrowers have turned to personal loans for debt consolidation, including the refinancing of credit card debt. Such loans are offered by both traditional banks and financial technology lenders, often in partnership with banks. Second, the buy-now-pay-later (BNPL) market has grown significantly over the past several years as an alternative payment method for consumers at point of sale, particularly for online purchases. BNPL providers, many of which are financial technology providers, offer consumers the option to pay for a purchase through an installment plan, often with low or zero interest. Additionally, several credit card lenders have recently introduced services that allow their credit card borrowers to convert eligible credit card transactions into installment plans post-transaction.

Recent Trends in Credit Card Pricing

The topic of credit card pricing and how it has changed in recent years has been a focus of public attention and is consequently reviewed in this report. The analysis of the trends in credit card pricing here 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 and balance transfers, rebates, minimum finance

[16] Information and acquisition channels data in this paragraph are based on proprietary data from Mintel Comperemedia.
[17] In 2021, direct mail solicitations rebounded substantially from the 2.1 billion offers mailed in 2020 and stood only slightly below the 3.3 billion offers mailed in 2019.

charges, over-the-limit fees, and late payment charges.[18] In addition, the length of the interest-free grace period, if any, can have an important influence on the amount of interest consumers pay on revolving credit card balances. It is also important to note that interest rates charged vary considerably across credit card plans and borrowers, reflecting the various features of the plans and the risk profile of the cardholders served.

Over time, pricing practices in the credit card market have changed. Today, card issuers offer a broad range of plans with differing fees and rates depending on credit risk, consumer usage patterns, and specific benefit packages. Following the economic downturn in 2009, new credit card rules spurred changes in interest rate pricing in 2009 and 2010.[19] In most plans, an issuer establishes a rate of interest for customers of a given risk profile; if the consumer borrows and pays within the terms of the plan, that rate applies. If the borrower fails to meet the plan requirements—for example, the borrower pays late or goes over their credit limit—the issuer may reprice the account to reflect the higher credit risk revealed by the new behavior. Regulations that became effective in February 2010 limit the ability of card issuers to reprice outstanding balances for cardholders who have not fallen more than 60 days behind on the payments on their accounts. Issuers may, however, reprice outstanding balances if they were extended under a variable-rate plan and the underlying index used to establish the rate of interest (such as the prime rate) changes.[20] These rules do not explicitly restrict initial pricing of new accounts.

The credit card pricing information used in this report is obtained from the Quarterly Report of Credit Card Plans (form FR 2835a). This survey collects quarterly 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 posted across all accounts; the latter is the average interest rate paid by only those accounts 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 incur finance charges. Together, these two interest rate series provide a measure of credit card pricing. The data are made available to the public each quarter in the Federal Reserve Statistical Release G.19, "Consumer Credit."

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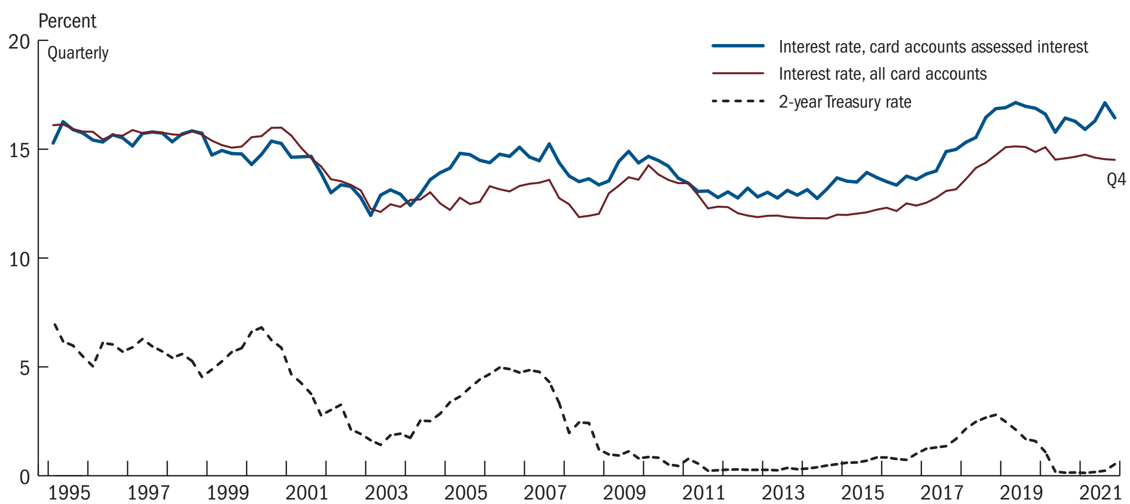
[18] In June 1996, the Supreme Court ruled that states may not regulate the fees charged by out-of-state credit card issuers. States have not been permitted to regulate the interest rates that out-of-state banks charge. In making its decision, the Court supported the position previously adopted by the Office of 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. See Valerie Block (1996), "Supreme Court Upholds Nationwide Card Charges," *American Banker,* June 4.
An assessment of the fees charged by credit card issuers is provided in U.S. Government Accountability Office (2006), *Credit Cards: Increased Complexity in Rates and Fees Heightens Need for More Effective Disclosures to Consumers,* report to the ranking minority member, Permanent Subcommittee on Investigations, Committee on Homeland Security and Governmental Affairs, U.S.Senate, GAO-06-929 (Washington: GAO, September), https://www.gao.gov/assets/gao-06-929.pdf.

[19] New rules include the Credit Card Accountability Responsibility and Disclosure (CARD) Act of 2009 and amendments to Regulations Z and AA passed in 2010.

[20] According to the Mintel Comperemedia data, about 95 percent of credit card mail offerings in 2021 were for variable-rate cards. Other data sources on credit card accounts confirm this observation.

Data from form FR 2835a indicate that the average credit card interest rate across all accounts decreased to 14.5 percent during 2021. At the same time, the yield on two-year nominal Treasury securities—a measure of the benchmark or "risk free" rate—inched up to approximately 0.5 percent (figure 1). The average interest rate on accounts that incurred interest was reported to be higher, increasing to 17.1 percent during the third quarter of 2021 but closing the year at 16.4 percent—approximately unchanged, on net, relative to the rate at the end of 2020.

Figure 1. Average interest rates on credit card accounts



Source: Federal Reserve Board, form 2835a, Quarterly Report of Credit Card Plans.