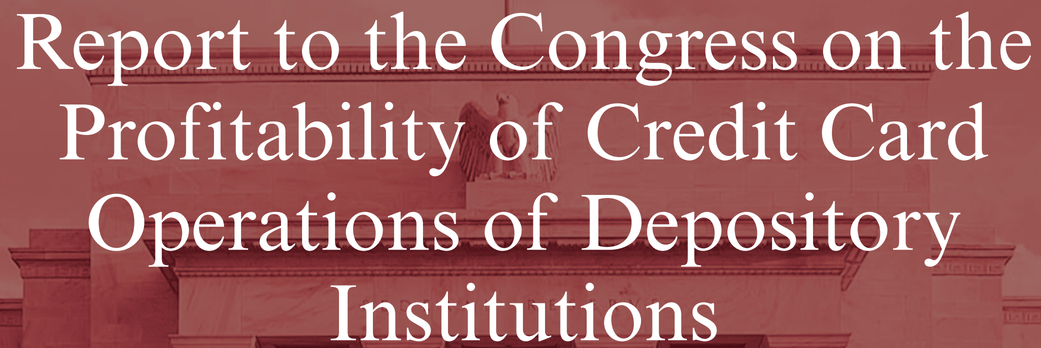

Report to the Congress on the Profitability of Credit Card Operations of Depository Institutions

July 2021

Board of Governors of the Federal Reserve System

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Introduction

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 31st report. 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]

[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, 2020, 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 FR 2835a).

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 cards. 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."

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 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 with 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, 2020, 10 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 banks' balance sheets.

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

[4] Two banks (Discover Bank and American Express Bank) included in the sample did not exactly meet the criteria. Those banks are major issuers on the Discover and American Express networks, and their balance sheets are largely consistent with the credit-card-focused business model.

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 2019 to 2020 did not have a meaningful 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 allowances 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 this change in methodology, loan loss provisions in 2020 and after are not necessarily comparable with those before 2020.

In 2020, credit card banks with assets in excess of $200 million reported net earnings, before taxes and extraordinary items, of 2.40 percent of average quarterly assets, with significant quarterly variation in profitability (table 1). As the last four rows of table 1 show, profitability fell sharply in the first half of 2020 before rebounding in the second half of the year.

Table 1. Annualized return on assets, large U.S. credit card banks, 2001–20
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
2020:Q1	0
2020:Q2	–.09
2020:Q3	4.10
2020:Q4	5.58

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. Profitability for the four quarters of 2020 is annualized.

Source: Federal Financial Institutions Examination Council, Consolidated Reports of Condition and Income (Call Reports), https://www.ffiec.gov.

The decline in profitability in 2020 reflects several changes in individual expense and revenue items (table 2). First, much of the fall in returns resulted from an increase in provisioning for loan losses. The

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

Table 2. Income and expenses for U.S. banks in 2019 and 2020

Percent of average quarterly assets

	Credit card banks in 2020	Credit card banks in 2019	All commercial banks in 2020
Total interest income	10.68	12.29	2.88
Total interest expenses	1.45	2.16	.36
Net interest income	9.23	10.13	2.52
Total noninterest income	4.39	4.34	1.32
Total noninterest expenses	6.47	7.00	2.37
Net noninterest income	–2.08	–2.66	–1.05
Provisions for loan losses	4.75	3.33	.63
Return	2.40	4.14	.88

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.

142 basis point increase was the biggest since 2008, reflecting large credit losses expected at the early stages of the COVID-19 pandemic due to the economic damage associated with the pandemic. In addition, part of this increase was due to the implementation of CECL. The increase in provisioning occurred in the first half of 2020 before dropping in the second half of the year. Indeed, provisioning fell to a historically low rate in the fourth quarter of 2020, supporting the rebound in profitability. Delinquency and charge-off rates for credit card loans across all banks fell in 2020 and continued to remain below their historical average rates.[6]

Second, net interest income declined in 2020, as interest income contracted at a faster pace than interest expense. This decrease was partially offset by an increase in net noninterest income stemming from lower noninterest expenses. Notably, these changes partially reflect a reallocation of assets at credit card banks.[7] Revolving credit declined 10.4 percent at credit card banks in 2020, whereas total assets declined only 4.1 percent. Cash and investment securities grew 45 percent, and, to the extent that these assets have a lower return than revolving debt, this reallocation lowered profitability at credit card banks.[8]

Credit card earnings have almost always been higher than returns on all bank activities, and earnings patterns for 2020 were consistent with historical experience.[9] The average return on all assets, before taxes and extraordinary items, was 0.88 percent for all banks, compared with 2.40 percent for the sample of all large credit card banks (as shown in table 2).

6 See Board of Governors of the Federal Reserve System (2021), statistical release, “Charge-Off and Delinquency Rates on Loans and Leases at Commercial Banks” (February 19), https://www.federalreserve.gov/releases/chargeoff.

7 Net interest income and net noninterest income scaled by revolving credit instead of assets stayed approximately flat in 2020.

8 For consistency, the percent changes in this sentence and the preceding sentence are based on a constant sample of banks identified as credit card banks in both 2019 and 2020.

9 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.

Market Structure

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.[10] 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 loans have substituted for borrowing that, in years past, might have taken place using other loan products, such as closed-end installment loans and personal lines of credit. As a convenient 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 over half of cardholders report they nearly always repay their outstanding balance in full before incurring interest each month.[11]

In the aggregate, the Federal Reserve Statistical Release G.19, "Consumer Credit," indicates that consumers carried $975 billion in outstanding balances on their revolving accounts as of the end of 2020, about $120 billion (11.2 percent) lower than the level at the end of 2019. This drop is the largest in a single year for revolving credit, in both dollar and percentage terms, in the history of the series.[12] This decline was driven, in part, by decreased credit card usage in 2020. The combined total number of charges and cash advances using credit cards fell 7 percent to 42 billion transactions in 2020.[13] The dollar volume of these transactions fell almost 10 percent to less than $3.7 trillion.

According to credit record data, the total dollar credit limit on outstanding credit card lines fell for the first time since 2010 but, at the end of 2020, remained higher, in nominal terms, than its previous peak in the third quarter of 2008. That said, the amount of available credit under outstanding credit card lines increased in 2020 and continues to far exceed the aggregate balances owed on such accounts. Credit record data indicate that as of the end of 2020, individuals were using slightly more than one-fifth of the total dollar amount available on their lines under credit card plans.[14]

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 585 million cards, or about 84 percent of general-purpose credit cards, in 2020.[15] In addition, American Express and Discover networks accounted for another 114 million general-purpose cards in 2020. A relatively small group of card issuers holds most of the outstanding credit card balances, with the top 10 holding 81 percent.[16] Several thousand other financial institutions offer

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

[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] The G.19 release is available on the Board's website at https://www.federalreserve.gov/releases/g19/Current. Revolving credit consists largely of credit card balances but also includes some other types of open-end debt, such as personal lines of credit.

[13] Figures cited in this sentence and the remainder of the paragraph are from the *Nilson Report.* See HSN Consultants, Inc. (2021), *Nilson Report,* no. 1191 (Carpinteria, Calif.: The Nilson Report, February).

[14] See Federal Reserve Bank of New York (2021), *Quarterly Report on Household Debt and Credit: 2020:Q4* (New York: FRBNY, February), https://www.newyorkfed.org/medialibrary/interactives/householdcredit/data/pdf/hhdc_2020q4.pdf.

[15] Figures cited in this paragraph are from the *Nilson Report*. See HSN Consultants, *Nilson Report,* in note 13.

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

credit cards to consumers, and these institutions are free to set their terms and conditions.[17]

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 imposing relatively high 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. In recent years, a new trend has emerged of some borrowers turning 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.

Various channels are used for new account acquisition and account retention.[18] 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 2020, 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 2.1 billion offers mailed in 2020.[19] Approximately 20 percent of applied-for offers were obtained by direct mail at the end of 2020.

[17] Currently, depository institutions—including commercial banks, credit unions, and savings institutions—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 two other large networks, American Express and Discover. However, the vast majority of cards issued on the American Express and Discover networks are originated by direct subsidiaries.

[18] Data on information and acquisition channels in this paragraph are based on proprietary data from Mintel Comperemedia.

[19] Direct mail solicitations are down substantially from 3.3 billion in 2019. That said, after reaching a low in June 2020, monthly solicitations have rebounded considerably.

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 charges, over-the-limit fees, and late payment charges.[20] In addition, the length of the interest-free grace period, if any, can have an important influence on the amount of interest consumers pay. 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 the benefits of the card. The economic downturn and new credit card rules spurred changes in interest rate pricing in 2009 and 2010.[21] 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.[22] 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 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 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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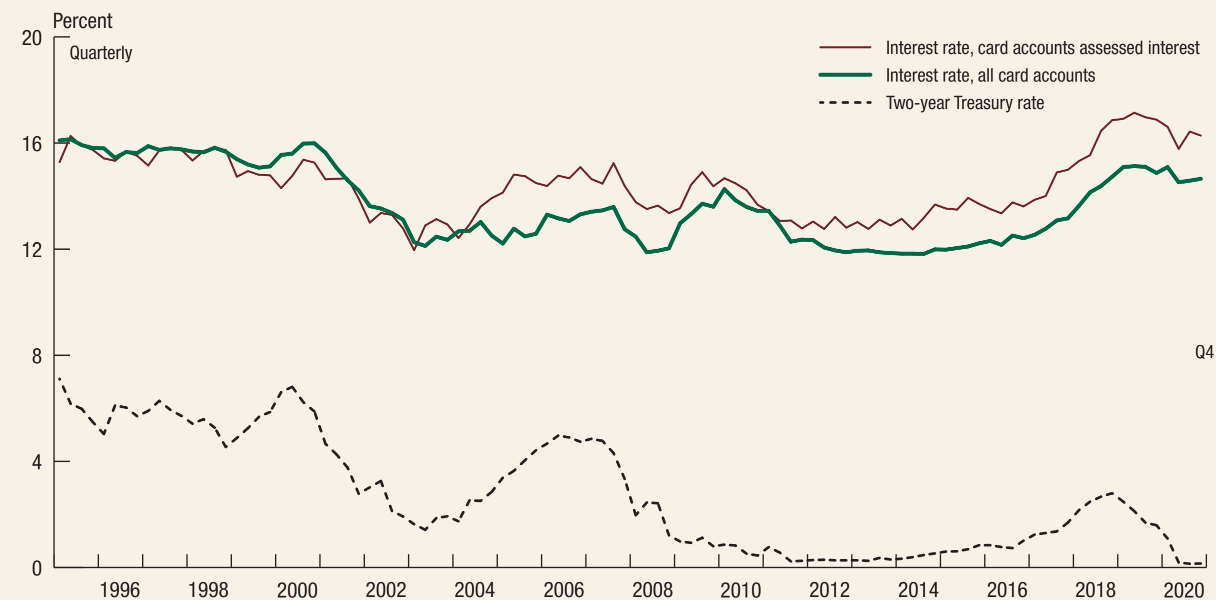
[20] In June 1996, the Supreme Court ruled that states may not regulate the fees charged by out-of-state credit card issuers. States have not been permitted to regulate the interest rates that out-of-state banks charge. In making its decision, the Court supported the position previously adopted by the 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.

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

[22] According to the Mintel Comperemedia data, more than 94 percent of credit card mail offerings in 2020 were for variable-rate cards. Other data sources on credit card accounts confirm this observation.

Figure 1. Average interest rates on credit card accounts



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

Data from form FR 2835a indicate that the average credit card interest rate across all accounts decreased to 14.5 percent during 2020 before inching up to 14.7 percent in the fourth quarter of 2020. At the same time, the two-year Treasury rate—a measure of the baseline, or "risk free," rate—fell to less than 0.2 percent (figure 1). Average interest rates on accounts that assessed interest are reported to be higher, falling to 15.8 percent during 2020 but closing the year at 16.3 percent.

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