



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

July 2018

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 28th report. The

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

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

Reports Elimination and Sunset Act. The report was subsequently reinstated by law.

² The Federal Reserve collects the Quarterly Report of Credit Card Plans (Form FR 2835a).

Identification of Credit Card Banks

Every insured commercial bank files a Call Report each quarter with its federal supervisory agency. 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. 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, 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.³

³ Two banks (Discover Bank and American Express Bank, FSB) included in the sample did not exactly meet these criteria. These

The first credit card banks were chartered in the early 1980s; few were in operation prior to 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, 2017, 12 banks with assets exceeding \$200 million met the definition of a credit card bank, two fewer than at the end of 2016. These banks accounted for nearly 50 percent of outstanding credit card balances on the books of depository institutions.

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. Accounting rule changes implemented in 2010 require banking institutions to consolidate onto 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.

Another difficulty that arises in assessing changes in the profitability of credit card activities over time is that the sample of credit card banks changes somewhat from one year to the next primarily because of changing bank loan portfolios. Thus, overall changes in profit rates from year to year reflect both real changes in activity and changes in the sample. In 2017, credit card banks with assets in excess of \$200 million reported net earnings before taxes and extraordinary items of 3.37 percent of average quarterly assets (table 1). The level of earnings in 2017 is down from that reported in 2016.

The decline in profitability in 2017 reflects a fall in net noninterest income and an increase in provisions for loan losses as a fraction of average assets, which more than offset increases in net interest income (table 2). Delinquency rates and charge-off rates for credit card loans across all banks increased modestly in 2017 but remain below their historical averages.

Although profitability for the large credit card banks has risen and fallen over the years, credit card earnings have almost always been higher than returns on all commercial bank activities.⁴ Earnings patterns for

⁴ 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. In preparing many of the older annual reports on credit card profitability, information from the Federal Reserve's

Table 1. Return on assets, large U.S. credit card banks, 2001–17
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

Note: Credit card banks are commercial 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 (FFIEC), Consolidated Reports of Condition and Income (Call Reports), <https://www.ffiec.gov/>.

2017 were consistent with historical experience: The average return on all assets, before taxes and extraordinary items, was 1.32 percent for all commercial banks, compared with 3.37 percent for the large credit card banks (as shown in table 2).

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 that 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 (1992), "Developments in the Pricing of Credit Card Services," *Federal Reserve Bulletin*, vol. 78 (September), pp. 652–66.

**Table 2. Income and expenses
for U.S. banks in 2016 and 2017**

Percent of average quarterly assets

	Credit card banks in 2017	Credit card banks in 2016	All commercial banks in 2017
Total interest income	10.60	10.13	2.81
Total interest expenses	1.35	1.06	.38
Net interest income	9.25	9.07	2.43
Total noninterest income	3.57	4.01	1.43
Total noninterest expenses	5.89	6.08	2.31
Net noninterest income	-2.32	-2.07	-.87
Provisions for loan losses	3.57	2.96	.25
Return	3.37	4.04	1.32

Note: Credit card banks are commercial 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 (FFIEC), Consolidated Reports of Condition and Income (Call Reports), <https://www.ffiec.gov/>.

Market Structure

Bank cards are widely held and extensively used by consumers. According to the Federal Reserve's Survey of Consumer Finances (SCF), about 71 percent of families had at least one credit card in 2016. 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.⁵

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 524 million cards, or about 84 percent of general-purpose credit cards, in 2017. In addition, American Express and Discover accounted for another 102.5 million general-purpose cards in 2017. The combined total number of charges and cash advances using such cards in 2017 reached 37.8 billion transactions, amounting to a dollar volume of about \$3.5 trillion.⁶

⁵ The numbers from the 2016 SCF—the most recent survey available—are little changed since 2010; for a discussion of credit borrowing in 2016, see Jesse Bricker, Lisa J. Dettling, Alice Henriques, Joanne W. Hsu, Lindsay Jacobs, Kevin B. Moore, Sarah Pack, John Sabelhaus, Jeffrey Thompson, and Richard A. Windle (2017), "Changes in U.S. Family Finances from 2013 to 2016: Evidence from the Survey of Consumer Finances," *Federal Reserve Bulletin*, vol. 103 (September), <https://www.federalreserve.gov/publications/files/scf17.pdf>.

⁶ Figures cited in this sentence and the remainder of the paragraph are from the *Nilson Report*. See HSN Consultants, Inc. (2018), *Nilson Report*, no. 1126 (February).

A relatively small group of card issuers holds most of the outstanding credit card balances, with the top 10 holding over 85 percent. Several thousand other banking institutions and credit unions offer credit cards to consumers, and these institutions are free to set their terms and conditions.⁷ In the aggregate, the Federal Reserve Statistical Release G.19, "Consumer Credit," indicates that consumers carried slightly over \$1 trillion in outstanding balances on their revolving accounts as of the end of 2017, about 6.1 percent higher than the level at the end of 2016.⁸

Based on credit record data, 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 2017, individuals were using less than one-fourth of the total dollar amount available on their lines under revolving credit card plans.⁹ The total dollar amount available has risen somewhat since 2010, but it is nearly 10 percent below its peak in 2008.

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 on higher-risk or late-paying

⁷ Currently, over 5,000 depository institutions, including commercial banks, credit unions, and savings institutions, issue Visa and Mastercard credit cards and independently set the terms and conditions on their plans. Many thousands of 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.

⁸ 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.

⁹ See the *Quarterly Report on Household Debt and Credit 2017:Q4* available on the Federal Reserve Bank of New York's website at https://www.newyorkfed.org/medialibrary/interactives/householdcredit/data/xls/HHD_C_Report_2017Q4.xlsx.

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 limit credit risk.

Various channels are used for new account acquisition and account retention.¹⁰ The most important

¹⁰ Information and data on acquisition channels are from Mintel Comperemedia; see www.comperemedia.com.

channel 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. Branches, kiosks, and ATMs are another important channel for account acquisition as banks take advantage of cross-selling opportunities. Finally, direct mail solicitations continue to be a relevant, though declining, channel. From its height of 7.1 billion in 2006, the number of direct mail solicitations is down to about 3.1 billion in 2017.

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. 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.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.

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. 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 his or her 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.¹² The new 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 cardholders 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 data are made available to the public each quarter in the Federal Reserve Statistical Release G.19, “Consumer Credit.”

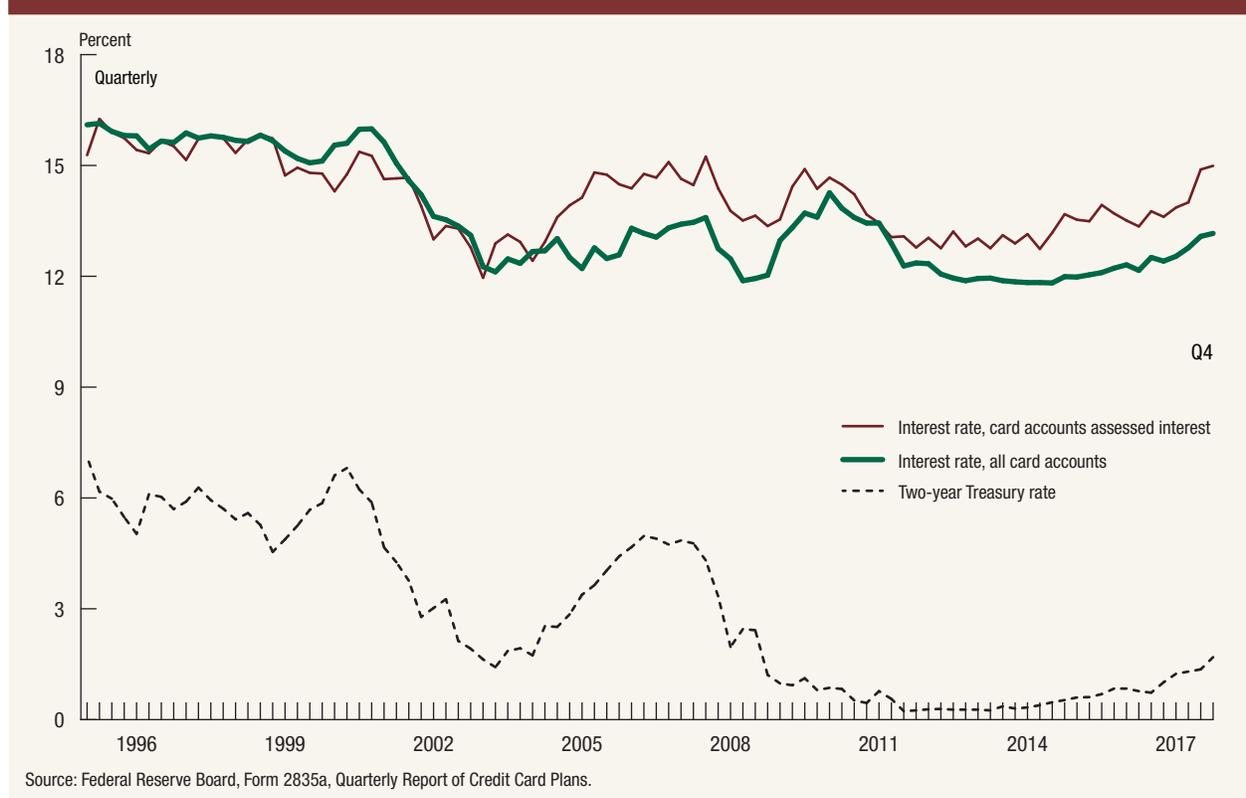
Data from Form FR 2835a indicate that the average credit card interest rate across all accounts increased to a level of about 13 percent, while the two-year Treasury rate—a measure of the baseline, or “risk free,” rate—rose to almost 2 percent (figure 1), leaving the spreads unchanged. Average interest rates on accounts that assessed interest are reported to be higher, at closer to 15 percent as of the fourth quarter of 2017. It is important to note that while average

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 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), www.gao.gov/new.items/d06929.pdf.

¹² According to the Mintel Comperemedia data, 96 percent of credit card mail offerings in 2017 were for variable-rate cards. Other data sources on credit card accounts confirm this observation.

Figure 1. Average interest rates on credit card accounts



interest rates paid by consumers have moved in a relatively narrow band over the past several years, 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.

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