

BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM



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

Submitted to the Congress pursuant to section 8 of the Fair Credit and Charge Card Disclosure Act of 1988

June 2013

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 twenty-third report. The analysis here is based to a great extent on information from the Consolidated Reports of Condition and Income (Call Report) and the Quarterly Report of Credit Card Interest Rates.²

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 or mono-lined 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; 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, 2012, 15 banks with assets exceeding \$200 million met the definition of a credit card bank. At that time, these banks accounted for approximately 60 percent of outstanding credit card balances on the books of commercial banks or in pools underlying securities backed by credit card balances.

Due to accounting rule changes regarding the treatment of securitized assets implemented at the beginning of 2010, profitability measures based on the Call Report since then are not perfectly comparable to years before 2010. Prior to 2010, this Report included off-balance-sheet securitized credit card receivables as part of total assets under the assumption that the Call Report income and expense items reflected some income and expenses related to these securitized assets. Analysis of quarterly Call Report data on income and expenses just before and after implementation of the accounting changes suggests that, in fact, the Call Reports prior to 2010 missed a substantial portion of the net income from securitized assets. Thus, profitability measures in Reports prior to 2010, while consistent over time, are understated relative to measures in 2010 and after.

To help provide a more consistent historic series, the profitability estimates since 2001 have been estimated excluding credit card securities from total assets. Although the estimated profit figures shown in this Report may overstate to some degree profitability from 2000-2009,

¹ Refer to 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 The Federal Reserve produces the *Quarterly Report of Credit Card Interest Rates*.

they are likely to be more consistent with profitability measures beginning in 2010 than profitability estimates provided in previous Reports.

In 2012, credit card banks with assets in excess of \$200 million reported net earnings before taxes and extraordinary items of 4.80 percent of assets excluding securities (Table 1, column 2).³ This level of returns is similar to (about 14 basis points higher) to the level of profitability measured after including securitized assets (shown in column 1 of Table 1) reflecting the change in accounting standards. The level of earnings in 2012 is lower than in 2011 when credit card banks as a group experienced net earnings of 5.37 percent. The 2012 rate of return is higher than the the average rate of return over the 2001-2012 timeframe which is estimated to be 4.24 percent, although not as high as levels reached in several of the years prior to the recent recession.

³. Calculations are adjusted for credit card backed 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 pools backing securities. Since the beginning of 2010 most credit card securitized assets have been included in outstanding on the Call Report.

Table 1. Return on assets, large U.S. credit card banks, 2001–2012
(Percent)

Year	Return including securitized assets	Return excluding securitized assets
2001	3.24	4.83
2002	3.28	6.06
2003	3.66	6.73
2004	3.55	6.30
2005	2.85	4.40
2006	3.34	7.65
2007	2.75	5.08
2008	1.43	2.60
2009	-3.01	-5.33
2010	2.36	2.41
2011	5.25	5.37
2012	4.66	4.80

NOTE: Credit card banks are commercial banks with average managed assets (loans to individuals including securitizations) greater than or equal to 200 million dollars with 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 pre-tax income as a percentage of average quarterly outstanding balances.

SOURCE: Reports of Condition and Income, 2001-2012.

Earnings for credit card issuers in 2012 reflect, in part, continuing improvement in credit quality which had deteriorated as a consequence of the recent recession. Delinquency rates on credit cards increased from nearly 4 percent at the beginning of 2007, to a peak of 6.8 percent in mid-2009, before falling back to about 4.2 percent at the end of 2010 and down to 2.7 percent at the end of 2012.⁴ Charge-offs on credit cards increased sharply in 2009 and into the first portion of 2010 in response to mounting delinquencies and defaults, but receded sharply in the second half of 2010 and has continued to fall since then. As defaults mounted during the recent recession, credit card issuers set aside a large amount of reserves to cover anticipated losses. By the end of 2012, the charge-off rate on credit cards at 4.08 percent was less than 40 percent of the rate experienced at its peak in mid-2010.⁵ Although credit card issuers experienced improved credit quality in 2012, they nonetheless increased provisioning for future losses restraining earnings in 2012.

Although profitability for the large credit card banks has risen and fallen over the years, credit card earnings have been almost always higher than returns on all commercial bank activities.⁶ Earnings patterns for 2012 were consistent with historical experience: For all

⁴ Refer to *Federal Reserve Statistical Release*, “Charge-Off and Delinquency Rates on Loans and Leases at Commercial Banks,” www.federalreserve.gov/releases/chargeoff/delallsa.htm.

⁵ Refer to www.federalreserve.gov/releases/chargeoff/chgallsa.htm.

⁶ 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 and cardholder profiles, and consequently the 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 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*,

commercial banks, the average return on all assets, before taxes and extraordinary items was 1.34 percent in 2012 compared to 4.80 percent for the large credit card banks.⁷

One 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 mergers and acquisitions. 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 sample each year was also examined for the prior year. Excluding the two credit card banks that were added to the ongoing sample for the analysis of 2012 activity, results indicate that profitability would have been lower by about 45 basis points.

General Discussion

Thousands of firms offer bank cards to consumers and consumers use their cards extensively.⁸ The Federal Reserve's *G.19 Consumer Credit* report indicates that consumers carried a total of about \$850 billion in outstanding balances on their revolving accounts as of the end of 2012, a value little changed from the amount outstanding at the end of 2011.⁹ Outstanding balances are notably lower now than when they reached their high point of about \$1.01 trillion in 2008 and reflect the lingering effects of the financial crisis that emerged in 2008 and the ensuing recession and muted recovery that have seen consumers reduce spending and card issuers tighten credit availability.

Based on credit record data, it is estimated that in 2012 credit card borrowing accounted for about 6 percent of all outstanding household debt including mortgage debt.¹⁰ 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 2012 individuals were only using about one-quarter of the total dollar amount available on their lines under revolving credit card plans.

Consumers use credit cards for purposes of borrowing, and as a convenient payment device and standby line of credit for unforeseen expenses. 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-rate grace period offered by card issuers. In fact, consumer surveys, such as the Federal Reserve's Survey of Consumer

vol. 78, no. 9 (September 1992), pp. 652-666.

⁷ Returns for all commercial banks are derived from the Reports of Condition and Income.

⁸ 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, two other large firms, American Express Co. and Discover Financial Services, issue independent general purpose credit cards to the public.

⁹ Refer to 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.

¹⁰ Refer to the *Quarterly Report on Household Debt and Credit*, available at www.newyorkfed.org/index.html.

Finances, typically find that about half of card holders report they nearly always repay their outstanding balance in full before incurring interest each month.¹¹

Prior to the early 1990s, card issuers competed primarily by waiving annual fees and providing credit card program enhancements such as airline mileage programs or other travel-related benefits. Since then, interest rate competition has played a more prominent role, although for some market segments enhancements, including “reward” programs, such as cash-back or point features, and temporary interest-free or reduced interest-rate periods (for balance transfers or new purchases), are especially important in gaining market acceptance.¹²

Until the recent financial crisis, many credit card issuers, including nearly all of the largest issuers, had lowered interest rates on the majority of their accounts below the 18 to 19 percent levels commonly maintained through most of the 1980s and early 1990s. More generally, credit card interest rates have become more responsive to issuers' cost of funds in recent years as more issuers have tied the interest rates on their plans directly to one of several indexes that move with market rates. Moreover, recent changes in credit card regulations that restrict the ability of card issuers to change interest rates on outstanding balances create an incentive for more issuers to convert from fixed-rate to variable-rate plans.

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

In the recent economic downturn card issuers aggressively reviewed interest rates and credit limits and reduced limits on millions of accounts, particularly accounts that were inactive or little used by cardholders.¹³ Issuers responded aggressively to the difficult economic environment because inactive or little used accounts posed considerable potential risk of loss while offering little potential for profit, as cardholders may draw on these accounts when they encounter financial distress. More recently, issuers have begun to expand credit access some by raising credit limits, although primarily for their best customers.¹⁴ Trends in credit card pricing are discussed in more detail below.

¹¹ The most recent survey found that 56.4 percent of card holders reported they usually pay their balances in full.

Refer to Jesse Bricker, Arthur B. Kennickell, Kevin B. Moore, and John Sabelhaus, (2012) “Changes in U.S. Family Finances from 2007 to 2010: Evidence from the Survey of Consumer Finances.” *Federal Reserve Bulletin*; <http://www.federalreserve.gov/Pubs/Bulletin/2012/articles/scf/scf.ht>,

¹² Refer to “Credit Cards: Increased Complexity in Rates and Fees Heightens Need for More Effective Disclosures to Consumers,” Government Accountability Office, GAO-06-929, April 21, 2006; available at www.gao.gov.

¹³ Information from a nationally representative sample of credit records found that about half of the bankcard holders that had at least one bankcard at the end of 2007 experienced a reduction in the aggregate limit available on their combined bankcards by end of 2010; this share rises to about three-fifths when the estimation period is extended to the end of 2012. These estimates include those individuals that had at least one bankcard account closed, which everything else the same would result in a lower aggregate limit. Estimate based on the FRBNY Consumer Credit Panel, refer to www.newyorkfed.org/index.html.

¹⁴ Refer to the *Quarterly Report on Household Debt and Credit*, available at www.newyorkfed.org/index.html.

The U.S. general purpose bank credit card market is dominated by VISA and MasterCard labeled cards that combined accounted for an estimated 423 million cards in 2012, an increase of about 3 percent from 2011.¹⁵ In addition, American Express and Discover Card Services provided another 113 million general purpose cards to consumers in 2012, up about 4 percent from 2010. The combined total of charge volume and cash advances using these credit cards in 2012 reached \$2.31 trillion up about 8 percent from the 2011 level. In total, these credit cards were used in transactions that involved over \$24 trillion dollars in 2012

Direct mail solicitations continue to be an important channel used for new account acquisition and account retention. After reaching an all-time high in 2006 of 7.0 billion direct mail solicitations, mailings fell sharply as the recent recession emerged. Mail solicitations fell to only 1.5 billion in 2009.¹⁶ Industry data indicate however that the retrenchment in mailings began to reverse starting in the third quarter of 2009 as prospects for economic recovery improved. Industry data on mail solicitation activity indicate mailings rebounded to 3.0 billion in 2010 and 4.2 billion in 2011. Solicitations fell back to about 2.6 billion in 2012.

Recent Trends in Credit Card Pricing

Aside from questions about the profitability of credit card operations, 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.¹⁷ 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 time, pricing practices in the credit card market have changed. Today card issuers offer a broad range of plans with differing rates depending on credit risk and consumer usage patterns. Risk-based pricing has become a central element of most credit card plan pricing regimes and the economic downturn and new credit card rules spurred changes in 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 their credit limit, the issuer may reprice the account reflecting 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 that have not fallen at least 60 days

¹⁵ Figures cited in this sentence and the remainder of the paragraph is from *The Nilson Report*, February 2013 issue 1,011.

¹⁶ Source: Data from Mintel Comperemedia. Refer to www.comperemedia.com.

¹⁷ 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.

An assessment of the fees charged by credit card issuers is provided in "Credit Cards: Increased complexity in Rates and Fees Heightens Need for More Effective Disclosures to Consumers," U.S. Government Accountability Office, Report 06-929, September 12, 2006. Refer to www.gao.gov.

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. The new rules continue to provide issuers with considerable pricing flexibility regarding new balances.

This report relies on credit card pricing information obtained from the *Quarterly Report of Credit Card Interest Rates* (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 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 data are made available to the public each quarter in the Federal Reserve Statistical Release *G.19 Consumer Credit*.

Because information from the FR 2835a survey does not have an extended historical interest rate series for comparison purposes, this report 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 2835a 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, and fell again over the 1998-2003 period (Table 2).¹⁸ Since early 1998, credit card interest rates have fluctuated between 12.78 and 15.85 percent.

It is important to note that while average 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 card holders served. For 2012, credit card interest rates averaged 12.96 percent for those incurring finance charges, down from 13.09 percent in 2011.¹⁹ It is important to note that as the recession emerged, spreads between issuers' cost of funds and prices charged on credit cards widened substantially, and have remained at elevated levels since then.

¹⁸ 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 Accountability Office, *U.S. Credit Card Industry* (GAO/GGD-94-23, 1994).

¹⁹ 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.

Table 2. Average most common interest rate on credit card plans, 1974–August 1994, and the interest rate assessed on accounts incurring interest charges, November 1994–2012

(Percent)

Year	Interest rate	Year	Quarter	Interest rate
1974	17.20	2005	February	14.13
1975	17.16		May	14.81
1976	17.05		August	14.75
1977	16.88		November	14.48
1978	17.03			
1979	17.03	2006	February	14.38
1980	17.31		May	14.77
1981	17.78		August	14.67
1982	18.51		November	15.09
1983	18.78			
1984	18.77	2007	February	14.64
1985	18.69		May	14.47
1986	18.26		August	15.24
1987	17.92		November	14.35
1988	17.78			
1989	18.02	2008	February	13.77
1990	18.17		May	13.51
1991	18.23		August	13.64
1992	17.78		November	13.36
1993	16.83			
1994	15.77	2009	February	13.54
1995	15.79		May	14.43
1996	15.50		August	14.90
1997	15.57		November	14.37
1998	15.59			
1999	14.81	2010	February	14.67
2000	14.91		May	14.48
2001	14.44		August	14.22
2002	13.09		November	13.67
2003	12.92			
2004	13.21	2011	February	13.44
2005	14.54		May	13.06
2006	14.73		August	13.08
2007	14.68		November	12.78
2008	13.57			
2009	14.31	2012	February	13.04
2010	14.26		May	12.76
2011	13.09		August	13.21
2012	12.96		November	12.81

Note: 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.