CFI In Focus

Large Bank Credit Card and Mortgage Data: A Tale of Two Portfolios

Lincy Chacko
Quant Supervision Manager III
Supervision, Regulation, and Credit Department[1]

In July 2022, the Federal Reserve Bank of Philadelphia began publishing a new quarterly series of large bank credit card and mortgage data, also known as *Public Y-14 data*. These data come from regulatory reporting that the largest banks in the country are required to submit, based on asset and portfolio thresholds. While these data have been collected and used internally within the Federal Reserve System for more than a decade, the quarterly public release of the data is unprecedented and provides a unique window into large bank portfolios.

These data are considered confidential supervisory information, but the Federal Reserve has approved the release of credit card and first-lien mortgage data at an aggregate level for specific variables of interest. Included in the quarterly data release are unique credit card variables related to payment behavior and line management that are not readily available elsewhere. This article provides context on the Public Y-14 data, highlights several variables, and uses data collected during the pandemic as a case study to analyze recent portfolio trends.

Key Takeaways

- The large bank credit card and mortgage data quarterly release is a rich source of data that is useful for understanding large bank lending strategies, consumer credit behavior, and responses to economic stress.
- The publicly disclosed data represent around four-fifths of the U.S. credit card market and about one-eighth of the U.S. first-lien mortgage market.
- The credit card data include payment-related variables that are not easily accessible through other public sources, including the dollar volume of revolving balances and the share of accounts making full, minimum, and between minimum and full payments. Line management variables, such as the share of accounts with a credit line increase or credit line decrease, are also included.
- The public data series tells a compelling story about consumer lending throughout the pandemic.

History of the FR Y-14 Data Collection

The Federal Reserve collects FR Y-14M data from bank holding companies, intermediate holding companies of foreign banking organizations, and savings and loan holding companies with $100 billion

[1] The author gratefully acknowledges Bob Hunt, Julia Cheney, and Andy Kish for their detailed edits and feedback, and Barbara Brynko for her editorial review. The views expressed here are those of the author and do not necessarily reflect the views of the Federal Reserve Bank of Philadelphia or the Federal Reserve System. No statements here should be treated as legal advice.

or more in total consolidated assets. Reporting is required for portfolios with balances that exceed $5 billion or that meet materiality thresholds relative to Tier 1 capital, the ratio of a bank's core capital divided by its risk-weighted assets.[2] These data are collected at the loan level, which means that institutions in the reporting panel submit data on every credit card or mortgage loan within their portfolio.

Regulators did not always have access to such detailed data on bank portfolios. In fact, the credit card and mortgage data were first collected at a segment level in 2011, as part of the Dodd–Frank Act regulatory reforms arising from the Great Financial Crisis (2007–2008). Prior to the Y-14 data collection, regulators relied on Security and Exchange Commission (SEC) filings, data reported on FR Y-9C consolidated financial statements, and internal reporting that banks provided to examination teams to piece together an understanding of large bank lending. This presented its own set of limitations and challenges. Publicly available data were not sufficiently granular to assess portfolio risk or monitor emerging trends. Banks' internal reporting provided much more detailed data to better inform assessments by examination teams, but data definitions and calculations varied across firms. The Y-14 data provided a consistent data collection across firms with common definitions for submitted variables, enabling meaningful peer comparisons and deeper insights into large bank portfolios.

Over time, the data evolved into the loan-level collection for mortgages and credit cards that is in place today. The primary uses of the data are "to assess the capital adequacy of large firms using forward-looking projections of revenue and losses, to support supervisory stress test models and continuous monitoring efforts, and to inform the Federal Reserve's operational decision-making as it continues to implement the Dodd–Frank Wall Street Reform and Consumer Protection Act of 2010."[3]

How to Use Public Y-14 Data

The Public Y-14 data are a subset of the Y-14M data collection, which include 35 credit card variables and 40 first-lien mortgage variables, reported on a quarterly basis from 2012Q3 forward. These data are aggregated at a portfolio level, and no individual firm information is publicly disclosed. The intent of this data release is to provide greater transparency around a rich source of regulatory data, while maintaining the confidentiality of specific firms.

As described in the data methodology document, adjustments are made to the data to provide a consistent historical time series, and a subset of firms are withheld from the published results to protect the confidentiality of individual institutions.[4] Previously published data can be restated because of firms that submit corrections or a change in the mix of firms. Last, the Public Y-14 data are limited to consumer bankcards and mortgage loans that are held in portfolio.

With this context in mind, the data are still representative of the largest banks in the country, particularly in exploring the overall trends and percentiles as opposed to absolute volumes. Sources such as the Federal Reserve Bank of New York's Quarterly Report on Household Debt and Credit provide

[2] See September 2021 Instructions for the Capital Assessments and Stress Testing Information Collection, Federal Reserve Board of Governors.

[3] See Federal Reserve Board — Reporting Forms FR Y-14M, Federal Reserve Board of Governors.

[4] See FR Y-14M Data Methodology, Federal Reserve Bank of Philadelphia.

context on the overall market with respect to consumer lending.[5] Research and surveys such as the Labor, Income, Finances, and Expectations (LIFE) Survey take a more detailed look into specific segments of the consumer finance population.[6]

In terms of credit cards, the publicly disclosed Y-14 data represent much of the market, estimated at around four-fifths of credit card balances.[7] The rest of the market is covered by banks owned by bank holding companies that do not meet Y-14 reporting thresholds or nonbanks and credit unions.[8] The large bank mortgage data are estimated to cover one-eighth of U.S. residential mortgage balances.[9] These data include first-lien mortgage and first-lien home equity loans that are held on firm balance sheets. Portfolio loans are of primary interest from a bank supervision perspective; they represent a firm's exposure to credit risk. Although the Y-14 population is less representative of the overall mortgage market, the data provide a useful context from the large bank perspective and echoes themes that are evident in the broader market.

How to Access the Data and What's Included

Large Bank Credit Card and Mortgage Data (philadelphiafed.org) This is the official site of the Large Bank Credit Card and Mortgage data, published by the Federal Reserve Bank of Philadelphia. The site is updated quarterly with new data, time series graphs, and the *Insights Report*, a narrative report that summarizes key trends.

Data Methodology (philadelphiafed.org) This document provides background information on the reporting panel, data adjustments, and variable definitions.

Large Bank Credit Card and Mortgage Data (FRED) The data series can also be accessed in FRED, the economic database managed by the Federal Reserve Bank of St. Louis.

Note: Sign up for email notifications when the updated data and *Insights Report* are released each quarter. Email Phil.LargeBankData@phil.frb.org with questions on the data or feedback on new variables, charts, or areas for analysis.

[5] See Household Debt and Credit, Federal Reserve Bank of New York, Center for Microeconomic Data. Note that some of the metrics contained in the Household Debt and Credit Report are not directly comparable to Y-14 metrics because of differences in calculations or populations. For example, delinquency definitions differ between the two data sources.

[6] See Labor, Income, Finances, and Expectations (LIFE) Survey, Federal Reserve Bank of Philadelphia, Consumer Finance Institute.

[7] See FR Y-14M Data Methodology, Federal Reserve Bank of Philadelphia.

[8] See The Consumer Credit Card Market, Consumer Financial Protection Bureau, October 25, 2023.

[9] See FR Y-14M Data Methodology, Federal Reserve Bank of Philadelphia.

Variables of Interest

There is much that can be gleaned from the Public Y-14 data, such as lending strategies, consumer credit behavior, and indications of economic stress. The data paint broad strokes about aggregate trends, which can be more deeply analyzed and supplemented with complementary data sources to convey a fuller story about the consumer credit landscape. The original intent of the data was for supervision purposes. And, unsurprisingly, the published variables provide great insight into large banks. However, there is also valuable information that can be gathered from the consumer perspective.

- Origination variables such as dollar and account volume, credit limit, credit score, and loan-to-value and debt-to-income ratios convey information on the credit quality and lending strategies of the large bank portfolio. These metrics can indicate whether consumer access to credit is tightening or loosening, as well as provide commentary on consumer demand, housing affordability, and general economic conditions.

- Credit performance variables, which can serve as indicators of portfolio and consumer stress, are dependent on banks' risk management strategies as well as economic conditions. Delinquency data are provided on both an *account basis* (the percentage of total accounts that are past due) and a *balance basis* (the percentage of balances that are past due). This can help identify whether changes in delinquency are driven by *frequency* (increased occurrence of accounts in delinquency) or *severity* (higher balances at risk of delinquency and potential default).

- For credit cards, valuable information about line management at large banks can be understood from the share of accounts that receive a credit line increase or credit line decrease. The Public Y-14 credit card data also contain payment-related variables that are not readily available elsewhere. This includes the share of accounts making full, minimum, and between minimum and full payments. The data are also provided on the volume of balances that revolve each quarter.

- Data are available on the 50th, 75th, and 90th percentile credit card utilization rates, a measure of the balances that consumers have drawn on their available credit lines. These data, combined with an analysis on commitments (the total credit line made available to consumers), the change in credit limits, and payment behavior can provide an indication of how utilization rates are driven by supply and demand.

- The aggregated large bank credit card and mortgage data can serve as a benchmark against firm-specific information. Many variables are reported at the percentile level, which can highlight more nuanced trends that might get lost in the aggregate numbers. For example, original credit limits (for credit card originations) and original loan size (for mortgage originations) are reported at the 50th, 75th, and 90th percentiles. While the average origination amount for each metric is useful, the percentile values also show how that distribution varies.

Trends in Large Bank Credit Card and Mortgage Data During the Pandemic

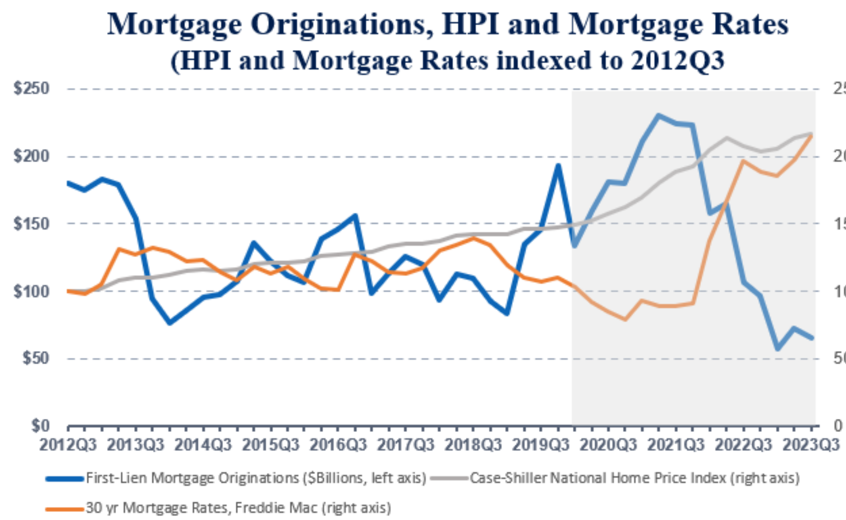
The publicly disclosed Y-14 data can be used to gain insights into new lending activity as well as overall portfolio characteristics. As a case study, we examine these data in the context of the pandemic.

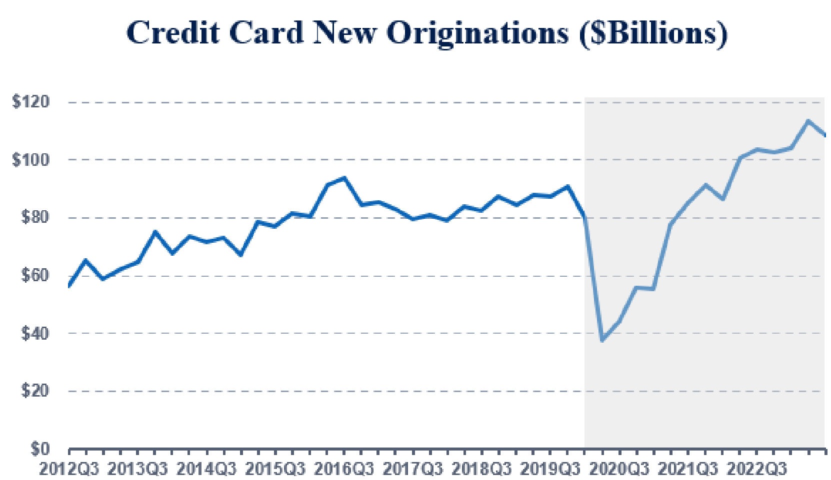
Figure 1 shows that, during and after the pandemic, the dynamics for mortgages and credit cards were quite different. At the onset of the pandemic, mortgage originations grew because of the effects of aggressive monetary policy that led to refinancing demand and new home purchases. Mortgage originations remained strong until rising home prices and the high interest rate environment from 2022 onward curtailed demand. Originations declined and eventually fell to the lowest level of mortgage originations since Y-14M data reporting began in 2012Q3. Unlike mortgage originations, there was a steep drop in new credit card originations at the start of the pandemic, but credit card originations recovered to 2019 levels by late 2021.

Selected Citations of the Public Y-14 Data in the Media

- Credit Card Delinquencies Surge as Americans Battle High Inflation, Interest Rates, *Fox Business,* January 15, 2024.
- Credit Card Delinquencies Surpass Pre-pandemic Levels, *CNN Business*, January 11, 2024.
- Credit Card Delinquency Rates Climb to Decade High in Fed Study, *Bloomberg,* January 11, 2024.
- Credit-Card Users Got Bigger Limits. Then They Racked Up $1 Trillion, *Wall Street Journal*, September 8, 2023.
- What's Behind $1 Trillion in Credit Card Balances, *Wall Street Journal*, August 29, 2023.
- Mortgage Capital Proposal Could Weigh Heavier on Housing Than Banks, *American Banker,* August 13, 2023.
- Could Overhaul of Big Bank Capital Rules Spark a Housing Fight? *Capital Account*, July 19, 2023.
- More 'Buy Now Pay Later' Users Are Seeing Their Credit Scores Drop After They Miss Payments, MarketWatch, April 30, 2023.
- Credit-Card Balances Have Hit Historic Highs. Here's Why That's a Worrying Sign, *MarketWatch*, April 18, 2023.
- Missing Factors in the CFPB's Analysis of Rising Credit Card Interest Rates, *Bank Policy Institute*, September 15, 2022.

Figure 1: Large Bank Originations

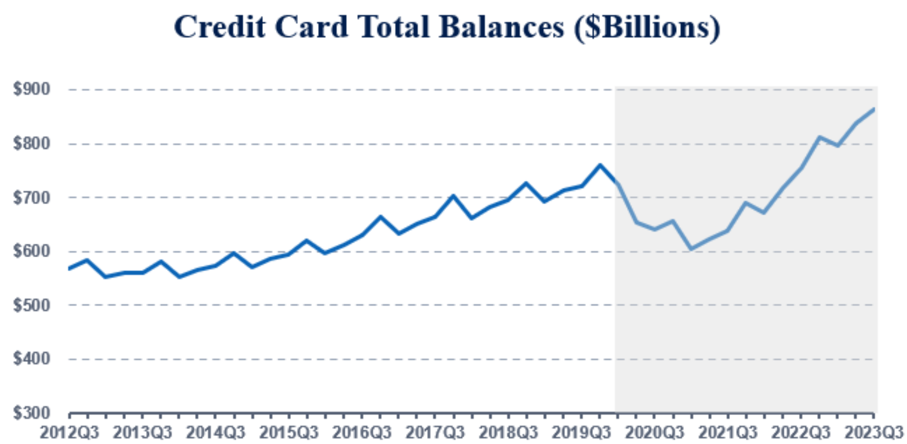




Notes: Large Bank Originations, Philadelphia Fed FR Y-14M Data. S&P Dow Jones Indices LLC, S&P CoreLogic Case-Shiller U.S. National Home Price Index [CSUSHPINSA], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/CSUSHPINSA, February 27, 2024. Freddie Mac, 30-Year Fixed Rate Mortgage Average in the United States [MORTGAGE30US], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/MORTGAGE30US, February 27, 2024. The shaded area highlights the COVID-19 and post-COVID-19 periods.

One of the effects of both the pandemic and the various forms of pandemic relief is evident in total credit card balances (**Figure 2**). After rising through 2019, credit card balances began to fall dramatically by the end of 2020Q1. Initially, this was an effect of fewer opportunities to spend during the strictest periods of the lockdowns. Later on, as the pandemic receded, consumer spending grew again, and, with it, the balances on credit cards recovered and eventually surpassed prepandemic levels.

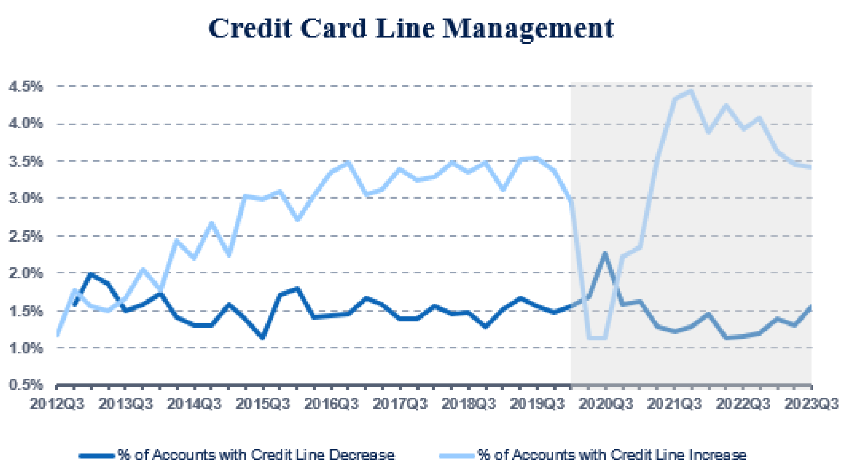
Figure 2: Large Bank Credit Card Balances



Notes: Large Bank Credit Card Balances, Philadelphia Fed FR Y-14M Data. The shaded area highlights the COVID-19 and post-COVID-19 periods.

On the supply side, lenders were initially cautious about extending new credit. One indicator is found in the proportion of accounts that experience an increase or decrease in credit line (**Figure 3**). The percentage of accounts with a credit line increase dropped significantly in 20202Q and 2020Q3, while the percentage of accounts with a credit line decrease peaked in 2020Q3 and returned to a normal level relatively quickly.

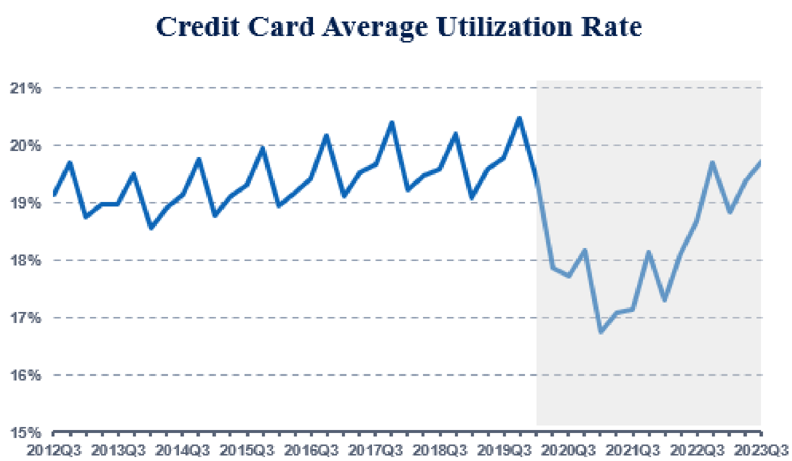
Figure 3: Credit Card Line Actions

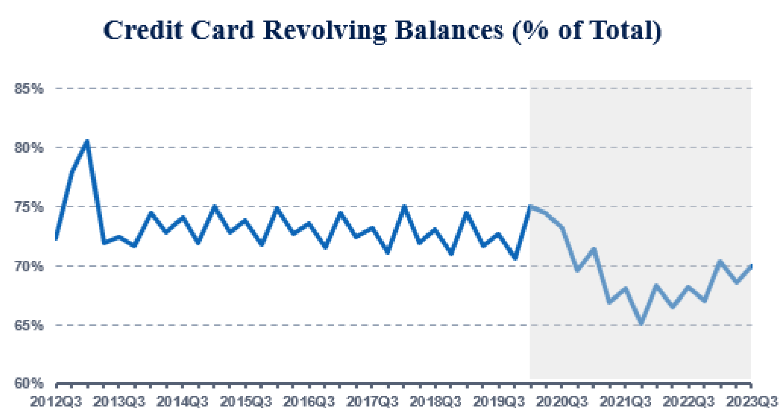


Note: Credit Card Line Actions, Philadelphia Fed FR Y-14M Data. The shaded area highlights the COVID-19 and post-periods.

Further evidence of credit card normalization is seen in the overall utilization of the credit lines available to consumers (**Figure 4**), which fell to a series low before recovering more recently, and in the proportion of balances that were revolving, and thus, likely subject to finance charges (Figure 4).

Figure 4: Credit Card Line Utilization Rate, Share of Revolving Balances





Notes: Credit Card Line Utilization Rate, Share of Revolving Balances**,** Philadelphia Fed FR Y-14M Data. Highlights the COVID-19 and post-COVID-19 periods.

For a period of time, the Coronavirus Aid, Relief, and Economic Security (CARES) Act offered consumers certain forms of *forbearance*. This permitted consumers to skip payments on mortgage, auto, student loan payments, and consumer loans without further damaging their credit. Forbearance was one of the many elements of relief, together with direct stimulus payments and enhanced unemployment benefits, that helped consumers weather the pandemic. The mechanics of these protections affect the data, as seen next.

The Public Y-14 data show that during the pandemic credit performance fared better than expected across consumer mortgage and credit card portfolios, supported by forbearance programs and stimulus funds that helped consumers to avoid delinquencies and lenders to avoid credit losses.
For credit cards, there was a surprising and sizable drop in delinquencies with the onset of the pandemic (**Figure 5**). Part of this was because of the forms of relief available to consumers described previously. Later, as balances began to rise (Figure 2), and the interest rates charged on those balances rose, delinquencies also started to rise and are now at higher levels than were experienced in the prepandemic period.

The delinquency pattern for first-lien mortgages, as reported in the Y-14 data, looks rather different than for credit cards. In Figure 5, there is a steep rise and gradual decline in delinquencies that is almost entirely driven by the take-up of forbearances by consumers.[10, 11]

A report from the Federal Reserve Bank of Philadelphia found that an estimated 8.5 million mortgage loan borrowers in the U.S. entered forbearance during the first year of the pandemic. Of these borrowers, 22.5 percent were able to self-cure, 58 percent became current with help, 11.7 percent paid off from forbearance or delinquency, and 7.9 percent remained in forbearance, delinquency, or default status approximately two years later.[12]

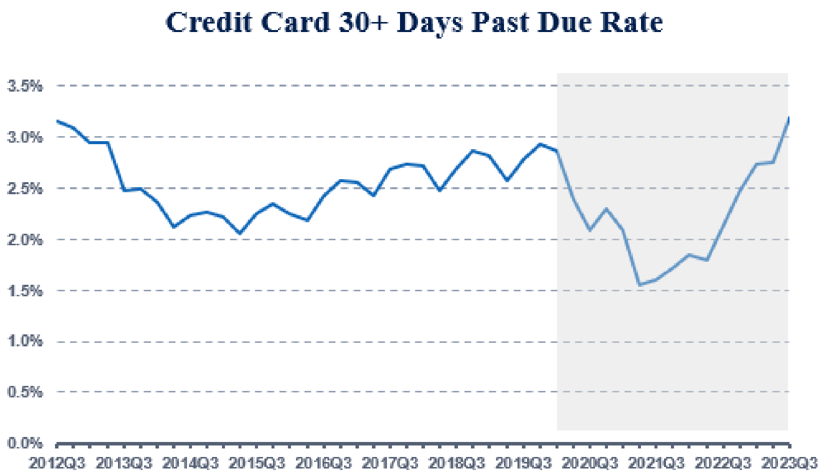
---

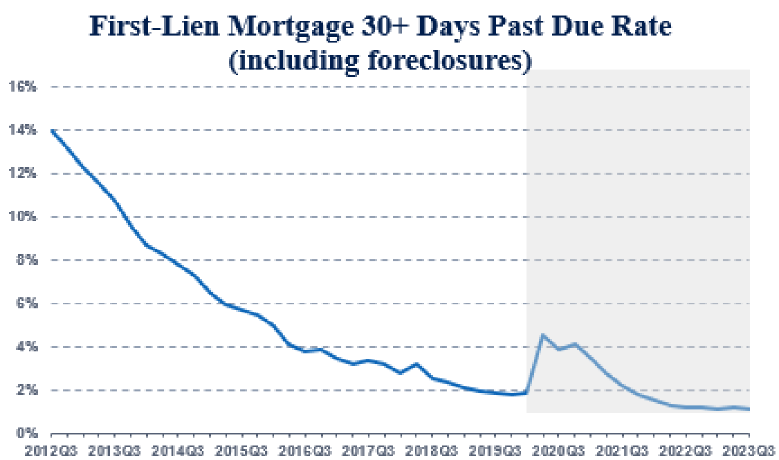
[10] During the pandemic, the CARES Act included stipulations for credit bureau reporting. Loans that were current when entering a forbearance arrangement remained current in credit bureau reporting, while accounts that were past due were kept from advancing to further stages of delinquency. Reporting instructions for Y-14M credit card data had a similar impact; credit card accounts in forbearance continued to be reported with the status at the time they entered into forbearance. However, the reporting instructions for Y-14M mortgage data resulted in accounts in forbearances potentially appearing delinquent over time.

[11] In Why Is the Default Rate So Low? How Economic Conditions and Public Policies Have Shaped Mortgage and Auto Delinquencies During the COVID-19 Pandemic, Federal Reserve authors write about the value of data that includes borrowers in forbearance when analyzing trends related to consumer debt obligations.

[12] See Examining Resolution of Mortgage Forbearances and Delinquencies, Federal Reserve Bank of Philadelphia, March 2, 2023.

Figure 5: Large Bank 30+ Delinquency Rates





Notes: Large Bank 30+ Delinquency Rates, Philadelphia Fed FR Y-14M Data. The shaded area highlights the COVID-19 and post-COVID-19 periods.

Conclusion

The Federal Reserve Bank of Philadelphia releases large bank credit card and mortgage data on a quarterly basis, including downloadable data files, time series graphs, and a written analysis of recent trends. This data release is a rich source of information, not only for regulators but also for the banking industry, the general public, and anyone interested in consumer credit trends. The data not only provide greater visibility into the credit card and mortgage portfolios at large banks, but they often reflect broader trends in the consumer credit market. As such, the Public Y-14 data are a valuable resource that can shed light on consumer engagement with the credit card and mortgage markets, as well as on potential areas of credit risk and consumer distress.