

SECTION 4

Market Risks

Liquidity and Deposits

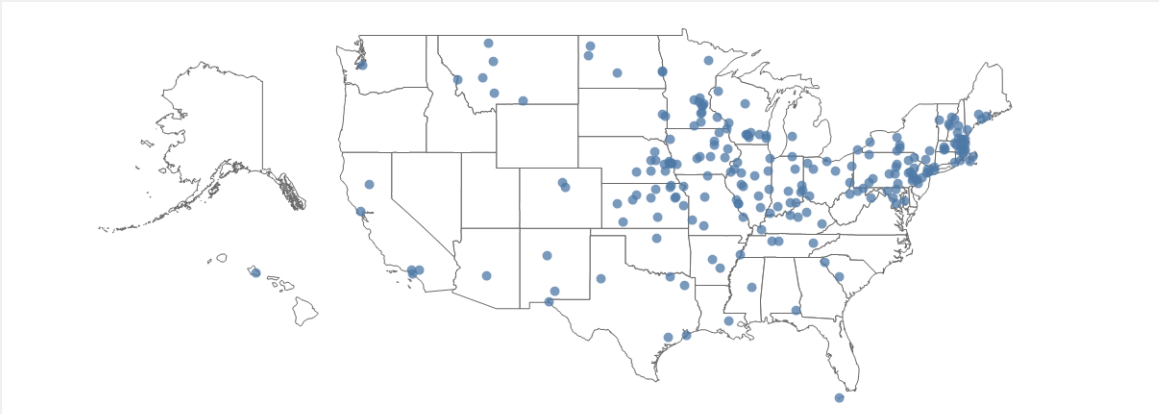
- Liquid asset levels among community banks declined during 2022 and continued to fall in first quarter 2023, in part reflecting securities losses and higher loan growth reducing cash balances. Liquid assets remained above the pre-pandemic level.
- Deposit levels grew among community banks, despite the decline in the industry overall.
- Community banks increased holdings of brokered deposits and Federal Home Loan Bank (FHLB) borrowings in 2022 and first quarter 2023 compared with 2021, and high unrealized securities losses remain a concern.
- Rising interest rates and changing economic conditions may contribute to increased liquidity risk.

On-balance sheet liquidity includes noninterest-bearing cash, interest-bearing cash, unpledged securities, federal funds sold, and securities purchased under resale agreements. With interest rates rising, many community bank securities portfolios reflect unrealized losses, making those assets a less favorable primary liquidity option.

- About 96 percent of community banks report some degree of unrealized losses in their securities portfolio, with 36 percent of community banks reporting unrealized losses higher than 25 percent of tier 1 capital.
- Short-term liquid asset ratios among community banks increased slightly in first quarter 2023 due to increased cash holdings.
- However, more community banks (198) report short-term liquid assets below 2 percent of total assets through first quarter 2023 compared to pre-pandemic 2019.

Five Percent of Community Banks Report Low Levels of Short-Term Liquid Assets

Dots on the map represent the 198 community banks (4 percent of all banks) that report short-term liquid asset ratios below 2 percent total assets in first quarter 2023



Source: FDIC.

Note: Short-term liquid assets include all cash balances, securities with maturities less than one year, federal funds sold, and securities purchased under agreement to resell.

Liquid assets among community banks declined in 2022 and continued to fall in first quarter 2023.

Among community banks, liquid assets to total assets declined to 20 percent at year-end 2022, down from nearly 27 percent in 2021 (Chart 38). This ratio continued to decline in first quarter 2023, with liquid assets falling to 19 percent of total assets and nearing the 2019 pre-pandemic level of 18 percent. Most liquid assets (more than 64 percent) were composed of securities, which depreciated considerably in 2022 amid rising interest rates. Although reduced from the 2021 level, the community bank liquidity ratio, which reflects the effects of unrealized losses, continued to exceed the 2019 pre-pandemic level through first quarter 2023. For many community banks, cash assets increased significantly early in the pandemic, with much of that increased liquidity the result of household stimulus money and proceeds from small business Paycheck Protection Program loans.

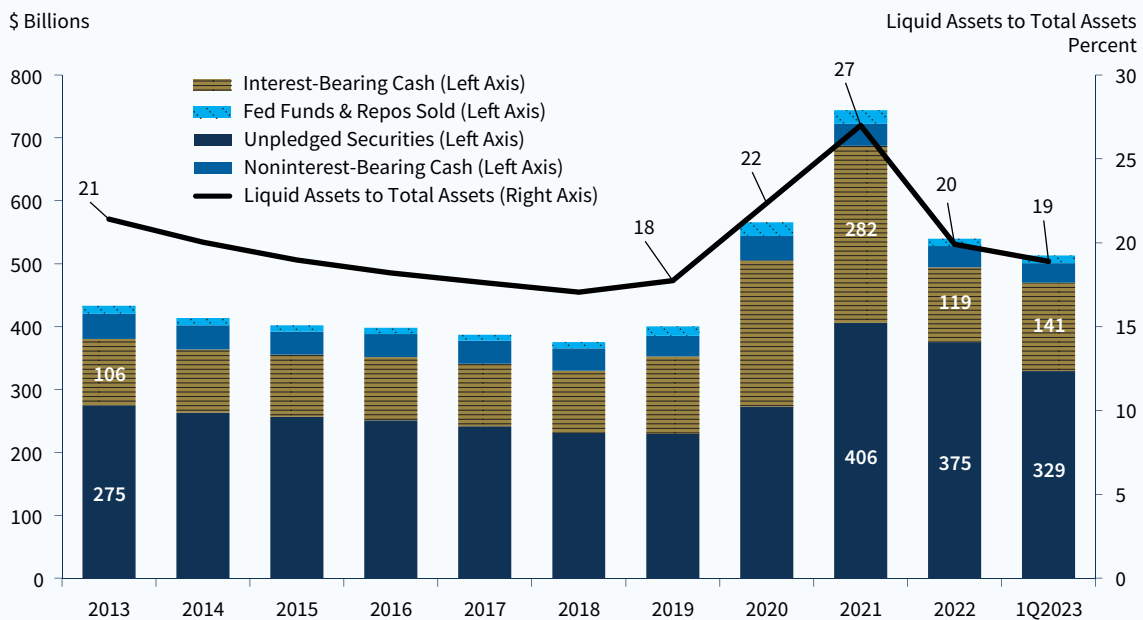
The most readily available liquidity sources, such as cash and due from accounts and federal funds sold, decreased the most since 2021. However, cash

balances rose in first quarter 2023 as banks increased wholesale funding in response to uncertainty caused by recent bank failures. This caused short-term liquidity to improve during the quarter despite the overall decline in total liquid assets. Among community banks, the median short-term liquid assets to total assets ratio decreased from 14.5 percent in 2021 to 8.0 percent in 2022 before improving slightly to 8.6 percent in first quarter 2023. Noncommunity banks reported a similar trend in short-term liquid assets to total assets, with the ratio decreasing from 12.1 percent in 2021 to 6.0 percent in 2022 before improving to 7.7 percent in first quarter 2023.

Community bank deposits grew, even as deposits declined for the total industry through first quarter 2023.

After unprecedented deposit growth during the pandemic, deposits reported by the banking industry began to normalize with total industry deposits declining by 4.9 percent between 2021 through early 2023, bringing total deposits to \$18.7 trillion at first quarter 2023. High inflation and rising interest rates contributed to the decline in deposits, creating

CHART 38
Community Bank Liquid Assets Decreased



Source: FDIC.
Note: The liquid assets to total assets ratio is a weighted average. Annual data except for first quarter 2023.

increased deposit competition for some banks. A reduction in uninsured deposits in first quarter 2023 contributed to the decline in total industry deposits. Although down considerably from the 2021 level, aggregate industry deposits remained much higher than the 2019 pre-pandemic level of \$14.5 trillion.

Despite the aggregate industry decline in deposits, community bank deposits grew 3.5 percent in 2022 and 0.5 percent in first quarter 2023. The bank failures in March 2023 prompted depositor concerns and resulted in withdrawal pressures for uninsured deposits. Community banks tend to rely less on uninsured deposits than noncommunity banks and therefore tend to be less vulnerable to outflows of uninsured deposits.¹⁰⁰ As of first quarter 2023, banks with assets under \$10 billion, most of which are considered community banks, reported a median uninsured deposits to total assets ratio of 20 percent compared to the largest banks, which reported

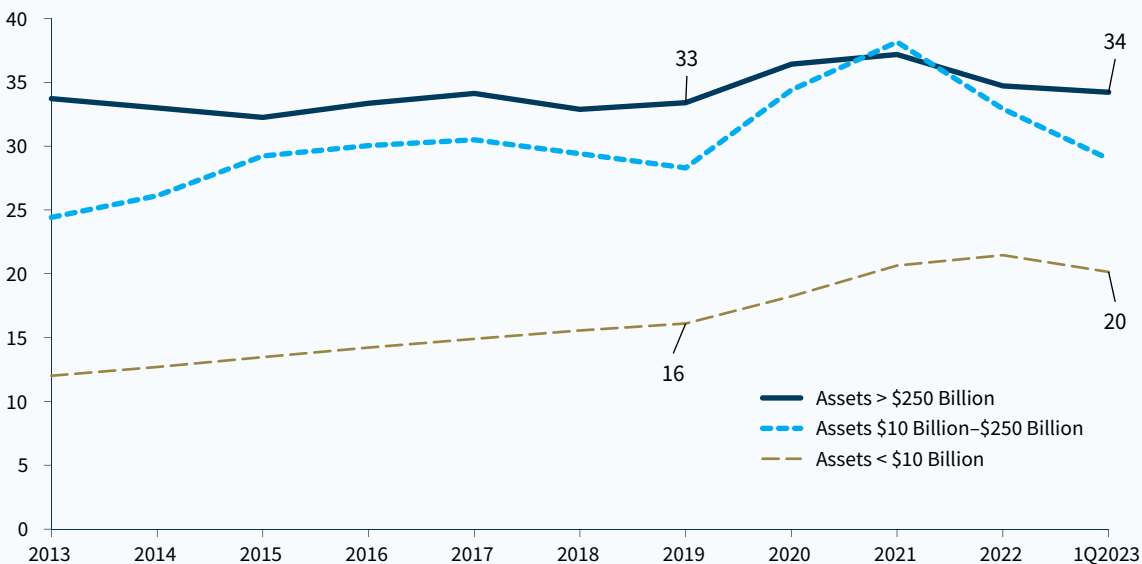
median uninsured deposits to total assets above 34 percent in first quarter 2023 (Chart 39). In first quarter 2023, noncommunity banks reported a 1.3 percent decline in total deposits, with most of that drop in uninsured deposit balances. Although community banks experienced a similar rate of uninsured deposit runoff, growth in insured balances of 3.7 percent more than offset a runoff of uninsured deposits during the quarter.

Community banks reported stronger loan growth and utilized cash balances. Loan growth increased for community and noncommunity banks in 2022, with community banks reporting loan growth of 14.4 percent compared to noncommunity bank loan growth of 7.8 percent. Loan growth continued modestly into first quarter 2023, with community banks reporting loan growth at 1.8 percent compared to first quarter loan growth for noncommunity banks at 1.0 percent (see the Banking Industry section of this report for

CHART 39

Small Banks Relied Less on Uninsured Deposits to Fund Assets

Median Uninsured Deposits to Total Assets
Percent



Source: FDIC.

Note: Most banks under \$10 Billion in assets are classified as community banks. Annual data except for first quarter 2023.

¹⁰⁰ The estimated amount of uninsured domestic deposits is derived by subtracting the multiple of the standard maximum deposit insurance amount, as defined under 12 CFR 330.1(o) (currently \$250,000), and the number of deposit and retirement accounts of more than the standard maximum deposit insurance amount (Schedule RC-O, Memoranda Items 1.b.(2) and 1.d.(2)) from the amount of deposit and retirement accounts of more than the standard maximum deposit insurance amount (Schedule RC-O, Memoranda Items 1.b.(1) and 1.d.(1)). Public deposits above the standard maximum deposit insurance amount equally are considered uninsured, even if the amounts are collateralized.

more information on loan growth trends). As loan demand outpaced deposit growth, community banks used on-balance sheet liquidity to fund new loans in 2022, primarily by drawing down interest-bearing cash accounts (Chart 38). On-balance sheet cash positions improved in first quarter 2023 as more community banks began building up cash from wholesale funding sources to safeguard liquidity.

As liquid asset levels contracted, wholesale funding among community banks increased.

Rising interest rates contributed to high unrealized losses on securities during 2022, and market stress concerns in first quarter 2023 led more banks to secure precautionary borrowing. Instead of liquidating securities and realizing losses, more community banks supported growing loan demand with increased wholesale funding, such as FHLB borrowings and brokered deposits. Through first quarter 2023, community banks reported that wholesale funding

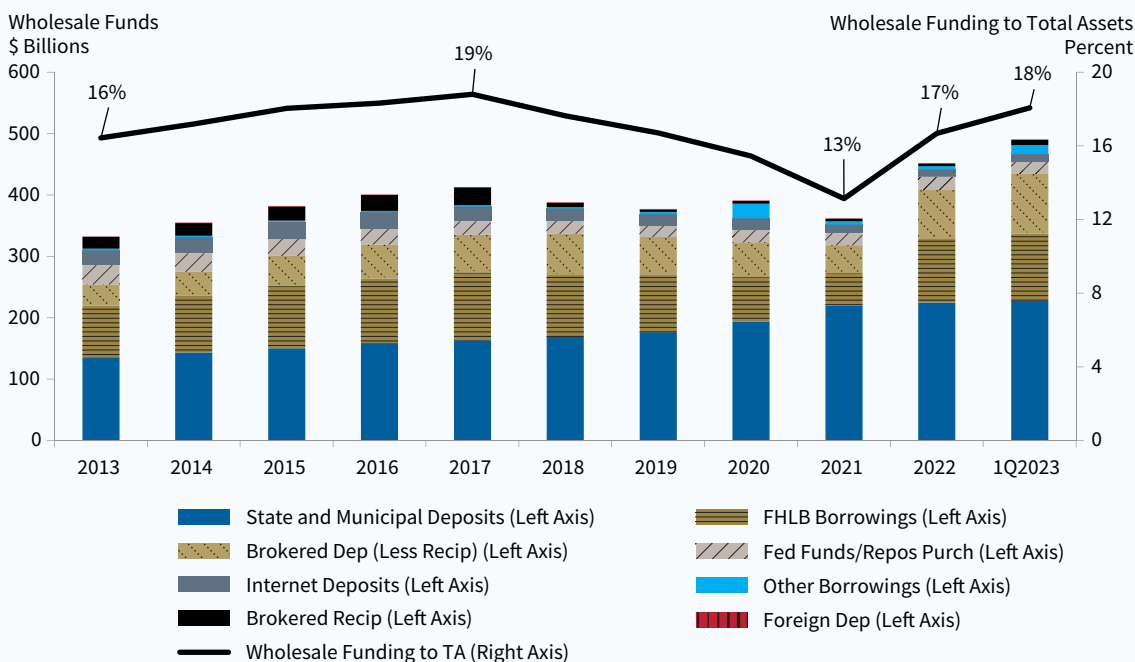
made up more than 18 percent of total assets, up from 13 percent in 2021 and above the 2019 pre-pandemic level (Chart 40).

For those banks with significant unrealized losses, certain counterparties such as the FHLB and large municipal or institutional depositors may impose restrictions on funding. To manage these and other risks to bank liquidity arising from securities depreciation, the Federal Reserve created the Bank Term Funding Program (BTFP) in March 2023. The BTFP provides liquidity to deposit institutions by lending at par against eligible collateral.¹⁰¹

The composition of wholesale funds held by banks tends to vary between community and noncommunity banks. Traditionally, community banks report a higher proportion of municipal and state funds compared to noncommunity banks (noncommunity banks report more in brokered deposits).¹⁰² Through first quarter

CHART 40

Community Banks Relied More on Brokered Deposits and FHLB Borrowings



Source: FDIC.

¹⁰¹ For more information, see the Federal Reserve’s description of the [Bank Term Funding Program](#).

¹⁰² Many states require banks to secure the uninsured or entire balance for deposits of government entities such as state or local municipalities, with some states also imposing placement requirements that include minimum condition standards, such as specific capital levels, for the bank receiving the deposits.

2023, municipal and state funds accounted for more than 46 percent of wholesale funds reported by community banks, followed by FHLB borrowings at 22 percent and brokered deposits at 20 percent. In comparison, noncommunity bank wholesale funds tend to be more widely sourced, led by brokered deposits at 25 percent, FHLB borrowings at 19 percent, and other borrowings at 15 percent. In response to the bank failures in March 2023, both community banks and noncommunity banks reported increased precautionary borrowings in the first quarter as many banks looked to build up cash.

Rising interest rates and changing economic conditions may contribute to increased liquidity risk. Continued inflationary concerns and expectations for sustained higher interest rates may heighten liquidity risk among community banks, particularly if securities portfolios depreciate further, loan growth continues, and core deposits recede from pandemic highs. In addition, social media and increased digitalization may amplify the speed and severity of deposit outflow, which may shorten available reaction time at points of deposit stress. The FDIC continues to focus on liquidity risks across the banking industry, including the impacts of bank failures on liquidity at institutions and implementing appropriate supervisory actions.

Net Interest Margins and Interest Rate Risk

- Rising interest rates benefited full-year net interest margin (NIM) in 2022, which increased sharply from 2021. But funding pressures intensified for many banks in first quarter 2023, causing NIM to decline.
- Many banks increased the share of long-term securities on their balance sheets in 2020 and 2021 amid weak loan demand (net of Paycheck Protection Program loans), contributing to greater interest rate risk across the industry.
- Banks with a higher share of long-term assets have reported more depreciation in investment portfolios and less NIM improvement than other institutions.
- Banks could find managing NIM more difficult in 2023 should interest rates remain elevated or continue to rise amid increasing competition for deposits.

The banking industry's annual NIM rose last year from the record low set in fourth quarter 2021, but quarterly NIM declined slightly in first quarter 2023. Industry-wide full-year NIM rose from a record low 2.54 percent in fourth quarter 2021 to 2.95 percent in fourth quarter 2022, reflecting higher asset yields and strong loan growth in the final three quarters of 2022. Noncommunity banks reported a greater increase in NIM than did community banks, with a 45 basis point increase to 2.89 percent in 2022, and more than 80 percent of noncommunity banks reporting an increase. NIM at community banks rose 17 basis points to 3.45 percent, with nearly two-thirds of community banks reporting an increase (Chart 41).

While annual NIM performance was strong in 2022, quarterly trends showed mounting pressure from rising funding costs in late 2022 and early 2023. Quarterly NIM growth slowed from a record high 35 basis point increase in third quarter 2022 to a 23 basis point increase in the fourth quarter before declining 7 basis points in first quarter 2023 as the rise in funding costs more than offset higher asset yields (Chart 42). NIM compression affected all bank asset size groups in first quarter 2023 except for the smallest asset size group, those banks with total assets less than \$100 million.¹⁰³ Although down from the prior quarter, the banking industry's first quarter 2023 NIM of 3.31 percent remained above the pre-pandemic average. Community bank NIM, which declined by a larger

amount than the industry overall, remained higher than that of noncommunity banks.¹⁰⁴ The last time quarterly NIM declined was first quarter 2022, when it declined by 1 basis point.

In contrast to first quarter 2023, bank funding costs did not rise as fast as short-term market rates last year, allowing banks to benefit from higher NIMs despite an inverted yield curve. During 2022, the increase in NIM was primarily due to two factors: the steep rise in asset yields that outpaced rising funding costs and strong growth in loan balances throughout 2022. Higher interest rates in 2022 lifted asset yields, which drove the increase in NIM. Reference rates of various maturities, such as the prime rate, SOFR, LIBOR, and the ten-year Treasury, all rose in 2022 as the Federal Reserve continued to raise its target rate.¹⁰⁵ As is typical in rising interest rate environments, most banks were able to reprice their assets upward more quickly than their liabilities.¹⁰⁶ Industry-wide quarterly annualized asset yields rose 183 basis points year over year to 4.54 percent in fourth quarter 2022, while quarterly annualized funding costs rose only 100 basis points in the same period. As a result, between fourth quarter 2021 and fourth quarter 2022, NIM for the banking industry rose 82 basis points, setting another record as the largest year-over-year increase in quarterly NIM in available data.¹⁰⁷ All components of interest income contributed to the increase in industry yield, but the largest driver of the increase was interest

¹⁰³ See the first quarter 2023 [FDIC Quarterly Banking Profile](#) for asset size groupings.

¹⁰⁴ The "pre-pandemic average" refers to the period first quarter 2015 through fourth quarter 2019.

¹⁰⁵ SOFR is the Secured Overnight Financing Rate. LIBOR is the London Interbank Offered Rate.

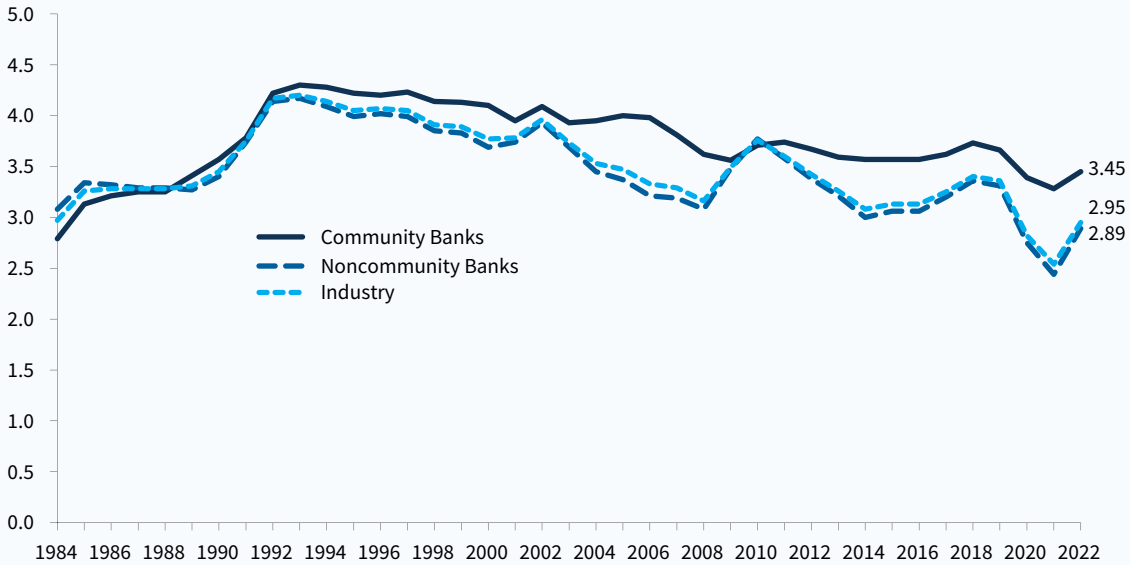
¹⁰⁶ Angela Hinton and Chester Polson, "[The Historic Relationship Between Bank Net Interest Margins and Short-Term Interest Rates](#)," *FDIC Quarterly* 15, no. 2 (2021), article 1.

¹⁰⁷ The discrepancy between the increase in yields minus the increase in funding costs and the change in NIM is due to rounding.

CHART 41

NIM Rose in 2022 for the First Time Since 2018

Full-Year Net Interest Margin
Percent

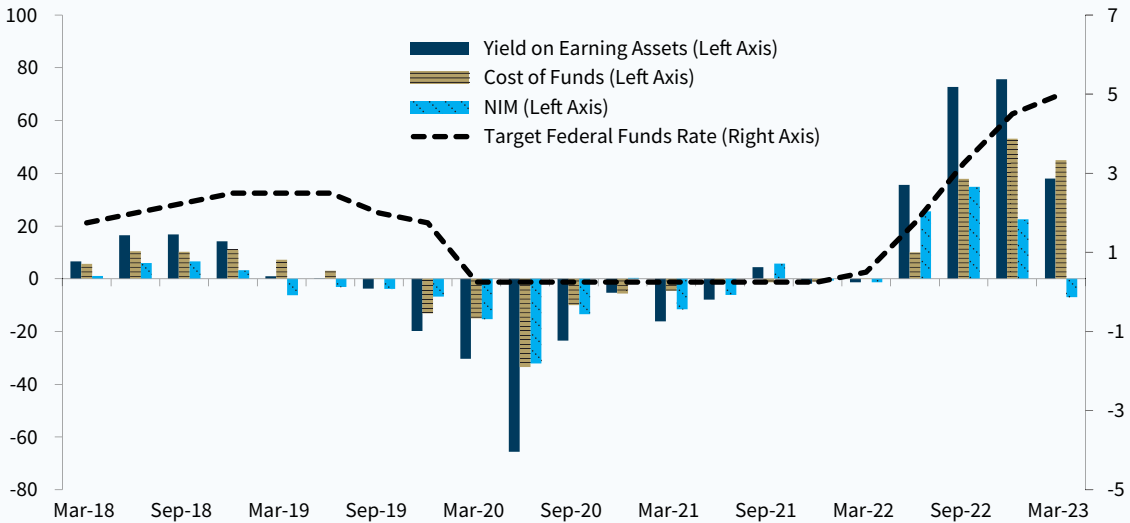


Source: FDIC.
Note: Full-year weighted average net interest margin as of fourth quarter each year.

CHART 42

NIM Declined in First Quarter as the Average Cost of Funds Rose More Than the Average Yield on Earning Assets

Quarter-Over-Quarter Change in Industry NIM Components
Basis points



Source: FDIC.
Note: Quarterly weighted average yield on earning assets and cost of funds; quarterly data through first quarter 2023. Target Federal Funds Rate is upper limit of target.

income on loans. Among loan categories, loans secured by non-1–4 family real estate and commercial and industrial loans contributed the most to the increase in asset yields. After loans, the next largest contributor to the increase in industry asset yields between December 2021 and December 2022 was cash and balances due from depository institutions. Total loans and cash and due from balances were also the largest contributors to the increase in asset yields reported in first quarter 2023.

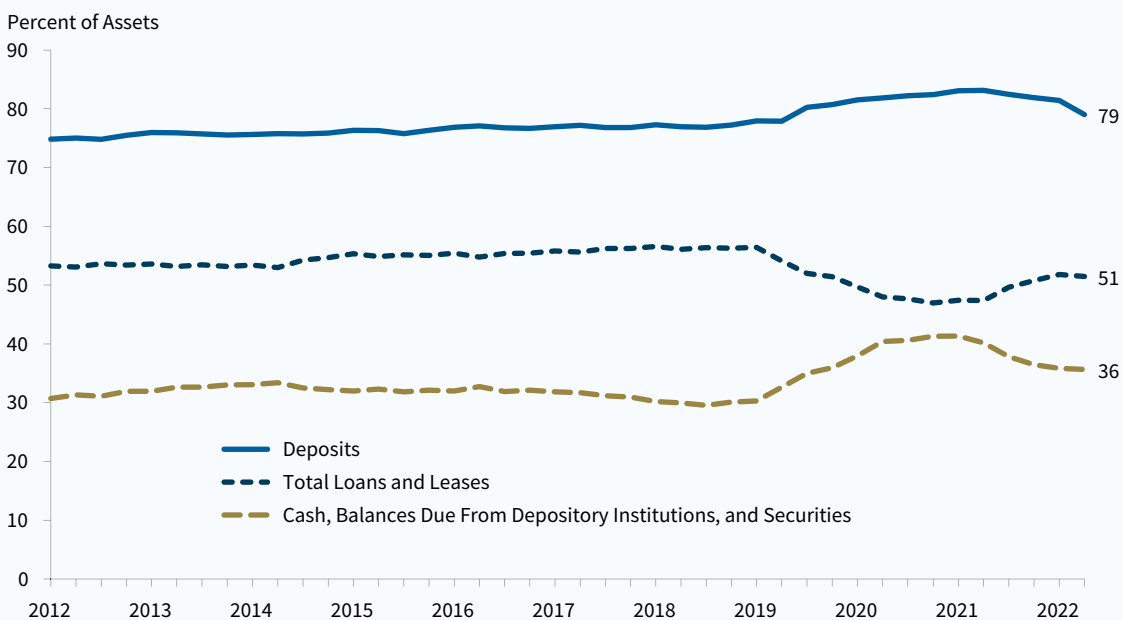
Strong loan growth during 2022 shifted earning asset composition and enhanced the positive effect of higher loan yields on NIM before slowing in first quarter 2023. The industry reported strong nominal loan growth of 8.7 percent in 2022, well above historical annual loan growth rates. Strong loan growth in 2022 shifted the industry composition of bank assets away from record-level holdings of lower-yielding cash and securities back toward greater

proportions of higher-yielding loans. By first quarter 2023, the industry ratio of cash and securities to assets had declined from a record high 41.3 percent in fourth quarter 2021 to 35.6 percent, and the industry ratio of loans to assets had risen from a record low 47.0 percent in third quarter 2021 to 51.5 percent (Chart 43). In contrast to loan growth during 2022, loan balances declined 0.1 percent in first quarter 2023, moderating the positive effects of lending activity on NIM. This contributed to the slowing of growth in asset yields in first quarter: growth in asset yields declined from more than 70 basis points per quarter in third and fourth quarter 2022 to 38 basis points in first quarter 2023.

Industry funding costs continued to rise through first quarter 2023, driven by expense on time deposits. Industry-wide quarterly funding costs rose 100 basis points to 1.16 percent between December 2021 and December 2022. At that time, this was the

CHART 43

Bank Balance Sheet Compositions Began to Normalize in 2022



Source: FDIC.
Note: Quarterly data through first quarter 2023.

largest year-over-year increase since third quarter 2006.¹⁰⁸ The largest contributors to the increase in funding costs throughout 2022 were savings deposits and interest-bearing transaction accounts. Noncommunity banks, which typically hold greater shares of rate-sensitive deposit accounts, reported a much larger increase in the cost of interest-bearing deposits than community banks (126 basis points versus 70 basis points). Deposit balances declined in the final three quarters of 2022 and first quarter 2023, bringing their share relative to assets closer to pre-pandemic levels and pressuring banks to raise rates on deposit products. Funding costs rose 45 basis points in first quarter 2023 as banks attempted to stem deposit outflows or sought alternative sources of funding. In contrast to 2022, the largest contributor to the increase in funding costs in first quarter 2023 was time deposits. As was the case in 2022, noncommunity banks reported a larger increase in their total funding costs and cost of interest-bearing deposits in first quarter 2023 than did community banks.

Banks with a higher share of long-term assets to total assets reported a smaller increase in NIM and larger depreciation in securities portfolios than their counterparts.¹⁰⁹ Banks that started 2022 with the highest share (top one-third) of long-term assets to total assets reported a 19 basis point increase in quarterly NIM between fourth quarter 2021 and first quarter 2023. Banks with the lowest share (bottom one-third), on the other hand, reported an increase of 98 basis points. Banks with a higher proportion of long-term assets that were locked in at lower rates had fewer opportunities to benefit from rising rates.

The sharp rate hikes in 2022 caused significant depreciation in the market value of bank investment portfolios, reducing the value of long-term securities the most. (See the Banking Industry section of this report for more information on unrealized losses on securities). Banks with the highest share of long-term securities (those maturing or repricing in three years or more) to total assets reported a rate of depreciation

on those securities of 9.8 percent in first quarter 2023, while banks with the lowest share reported depreciation of only 6.3 percent. Although 2022 proved to be a challenging year in terms of unrealized losses on bank investment portfolios, pressure lessened in first quarter 2023 as medium- and long-term interest rates declined and securities issued during lower interest rate environments continued to mature.

Banks could find managing NIM more difficult in 2023 should interest rates remain elevated or continue to rise amid increasing competition for deposits. For the greater part of 2022, banks were generally able to pass interest rate increases on to borrowers while maintaining low funding costs. However, toward the end of 2022, bank funding costs began to rise more steeply, and growth in asset yields moderated. By first quarter 2023, the increase in funding costs outpaced the increase in asset yields. As depositors seek stability and search for yield, it is plausible that increased deposit runoff could pressure banks to continue to raise deposit rates from last year's low levels to remain competitive for deposits, which would add further upward pressure on funding costs. Given the uncertainty surrounding interest rates and the economy in 2023, loan growth may continue to be subdued and therefore provide less support to net interest income and NIM than was the case in 2022. While upward pressure on bank funding costs suggests a weak outlook for NIM in 2023, unrealized losses on investment portfolios may abate, absent additional rate shocks.

¹⁰⁸ Industry-wide quarterly funding costs rose 102 basis points year over year in third quarter 2006.

¹⁰⁹ Long-term assets are those maturing or repricing in more than three years. Banks with the lowest share of long-term assets to total assets are those in the bottom third of institutions, with a share of 39.7 percent or less as of fourth quarter 2021. Banks with the highest share of long-term assets to total assets are those in the top third of institutions, with a share of 51.8 percent or more.