Risk Review

2024





Risk Review

2024





TABLE OF CONTENTS

INTRODUCTION	1
SECTION 1: Executive Summary	3
Key Risks to Banks	3
SECTION 2: Overview of Conditions and Banking Performance	5
Economic and Financial Markets Conditions	5
Banking Performance Overview	10
SECTION 3: Market Risks	15
Liquidity, Deposits, and Funding	15
Net Interest Margins and Interest Rate Risk	21
SECTION 4: Credit Risks	27
Commercial Real Estate	27
Residential Real Estate	33
Consumer	37
Agriculture	41
Small Business	46
Corporate Debt and Leveraged Lending	49
Nonbanks	53
Energy	56
SECTION 5: Operational and Cyber Risks	59
SECTION 6: Climate-Related Financial Risks	61
SECTION 7: Crypto-Asset Risks	67
ACRONYMS AND ABBREVIATIONS	69
GLOSSARY OF TERMS	71



INTRODUCTION

The FDIC was created in 1933 to maintain stability and public confidence in the nation's financial system. A key part of accomplishing this mission is the FDIC's work to identify and analyze risks that could affect the safety and soundness of banks. The Risk Review summarizes the FDIC's assessment of risks in economic and market conditions affecting the banking industry. The analysis pays particular attention to risks that may affect community banks, as the FDIC is the primary federal regulator for most community banks and has a unique perspective on these institutions.1

The 2024 Risk Review provides an overview of banking risks in 2023 in five broad categories: market risks, credit risks, operational risks, crypto-asset risks, and climate-related financial risks. The market risks areas

discussed are liquidity, deposits and funding, and net interest margins and interest rate risk. The credit risks areas discussed are commercial real estate, residential real estate, consumer, agriculture, small business, corporate debt and leveraged lending, nonbanks, and energy. The discussion of operational risks examines the potential negative impact to banks from cyber threats and illicit activity. The cryptoasset risks section discusses the FDIC's approach to understanding and evaluating crypto-asset-related markets and activities. The discussion of climaterelated financial risks focuses on the physical risk of severe weather and climate events to the banking system. Monitoring these risks is among the FDIC's top priorities.

¹eCommunity banks" are FDIC-insured institutions that meet the criteria developed for the FDIC Community Banking Study, published in December 2012 and updated in 2020. At year-end 2023, there were 4,587 banks, of which 4,140 were deemed to be community banks.



SECTION 1

Executive Summary

Economic conditions remained strong in 2023, and financial market conditions improved toward the end of the year. Economic growth exceeded expectations in 2023 despite higher interest rates. Inflation moderated in 2023 but remained above the Federal Reserve's 2 percent target rate, keeping monetary policy tight and interest rates elevated. Labor market conditions slowed but remained tight, which supported consumer incomes. Financial markets were volatile in 2023, but conditions were more favorable toward the end of the year as equity markets rebounded and corporate bond market conditions improved. Treasury yields were volatile during the year and the yield curve remained inverted. Bank stocks underperformed in 2023.

The banking industry demonstrated resilience after a period of stress in early 2023 as full-year net income remained high, overall asset quality metrics were favorable, and liquidity stabilized.

The banking industry's earnings remained high in 2023 as higher net interest income more than offset higher provision expense. For community banks, net income declined because of higher noninterest expense, lower net interest income, greater losses on the sale of securities, and increased provisions. Though unrealized losses on securities moderated substantially in the fourth quarter, they remained elevated in 2023. Deposit levels declined during the year, affecting liquidity positions, but increased in the fourth quarter for the first time in seven quarters. While bank lending slowed in 2023, growth remained positive and asset quality remained favorable. Capital levels increased in 2023. The number of problem banks at year-end represented 1.1 percent of total banks, which is near the low end of the typical range for non-crisis periods.

Key Risks to Banks

Market risks posed challenges for the banking industry in 2023 with higher interest rates, an inverted yield curve, declining deposits, higher cost of funding, and compressing net interest margins for some banks. The decline in bank deposits and a shift toward higher-yielding deposit accounts put upward pressure on bank cost of funds and interest expense. In response, many banks reduced securities to fund deposit outflows, pledged securities to ensure access to liquidity lines, and turned to higher-cost borrowings to cover anticipated liquidity needs. Community banks increased their reliance on wholesale funding to support strong loan growth, resulting in weakened liquidity positions to year-end levels not seen since 2009. The industry's net interest margin increased in 2023 despite rising funding costs and an inverted yield curve, but margin changes varied across the industry. Banks continued to hold an elevated share of long-term assets overall, putting pressure on margins in a higher-rate environment, but some banks began to sell off lower-yielding securities to reinvest at higher rates. Net interest margin compression contributed to a larger share of unprofitable community banks in 2023.

Credit risks varied by loan type in 2023, with greater asset quality deterioration occurring in commercial real estate and consumer loans.

• Commercial Real Estate: Most commercial real estate markets were resilient in 2023, but markets for office and retail malls were weak. While commercial real estate loan quality overall remained favorable at year-end 2023, weakness emerged, particularly among office properties in large bank portfolios. The ability to refinance commercial real estate loans remains a challenge to borrowers and the banking industry amid high interest rates, softening property values, and emerging credit weakness.

- Residential Real Estate: High mortgage rates contributed to a slowdown in housing activity in 2023, but housing prices increased during the year as the supply of homes for sale remained tight. Affordability of homes decreased, especially for first-time buyers. Credit quality remained sound, but early signs of stress emerged, particularly at community banks.
- Consumer: Consumer loan growth at banks slowed in 2023 as banks tightened lending standards and households reduced their demand for loans. Household balance sheets were solid in 2023 with higher net worth, but household savings declined despite higher incomes. Consumer loan performance weakened in 2023, led by credit card and auto loans.
- Agriculture: Agricultural conditions remained strong and supported agricultural lending, favorable asset quality, and higher loan concentrations at banks.
- Small Business: Small businesses reported challenges of high inflation and tight labor markets, but steady consumer spending helped support business conditions in 2023. Small business asset quality remained relatively sound.
- Corporate Debt and Leveraged Lending: Corporate debt increased in 2023 as market conditions improved, while bank lending to businesses continued to tighten. Leveraged loan default rates have increased but remain near the long-term average. Higher interest rates may continue to challenge some borrowers, but limited near-term corporate debt maturities should mitigate some risks in the short term.

- Nonbanks: Bank lending to nonbanks moderated in 2023. Despite favorable asset quality measures, sudden changes in market conditions may pose potential indirect and direct risks to nonbanks and their lenders.
- Energy: Economic conditions in energy-producing states were generally favorable in 2023, buoyed by higher U.S. oil production. Bank loan exposure to oil and gas firms continued to decline. Community bank asset quality in energy-producing states deteriorated slightly, but loan delinquency rates remained low by historical standards.

Operational and Cyber Risks: Ransomware and supply chain attacks continue to threaten banks and their third parties. Geopolitical events continued to increase the likelihood of cyber-attacks on banks. Check fraud continued to rise, despite a general decline in the use of checks. Adoption of quantum computing and artificial intelligence can pose new risks to critical infrastructure systems.

Climate-Related Financial Risks: In 2023, the number of billion-dollar climate events was the highest since 1980. While insurance policies may cover some or all of the loss associated with many severe climate and weather events, policies are becoming more expensive or unavailable, increasing risks to the banking industry.

Crypto-Asset Risks: While limited, crypto-assetrelated activities can pose novel and complex risks to the U.S. banking system that are difficult to fully assess. The FDIC, in coordination with the other federal banking agencies, took steps in 2023 to closely monitor crypto-asset-related activities of banking organizations.

SECTION 2

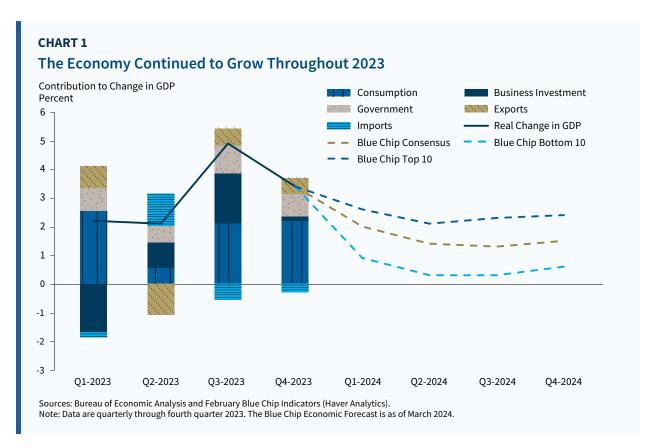
Overview of Conditions and Banking Performance

Economic and Financial Markets Conditions

- Economic growth exceeded expectations in 2023 despite higher interest rates.
- · Labor market growth slowed during the year but remained historically tight.
- Inflation fell in 2023 but remained above the Federal Reserve's 2 percent target rate, keeping monetary policy tight and interest rates high.
- Financial markets were volatile in 2023 but ended the year optimistic about the outlook for the economy. Equity markets rebounded, though bank stocks underperformed.
- · Treasury yields rose and the yield curve remained inverted. Corporate bond market conditions improved.

Economic growth exceeded expectations for much of 2023. Bolstered by resilient consumer spending, the U.S. economy expanded in all four quarters of 2023, defying analyst expectations for slower growth or even a recession (Chart 1). Consumer spending

(consumption) was the primary driver of economic growth, followed by government spending. Labor market growth slowed during 2023, but conditions remained historically tight, supporting consumer spending and economic conditions overall. Monthly



payroll employment gains slowed in 2023, and the unemployment rate edged up but was still near historical lows. Labor shortages eased in 2023, as the labor force participation rate increased from the lows reported since 2020. Still, job openings were elevated relative to unemployed workers at year-end 2023 and above the pre-pandemic level (Chart 2).2 Wage gains remained strong in nominal terms, and real wage gains strengthened as inflation declined.

Labor market conditions varied by state. The unemployment rate increased in 29 states and declined in 16 states in 2023. The largest increase was in New Jersey (10 percentage points) and the largest decline was in Wyoming (0.5 percentage points).

Consumer spending moderated in 2023 but remained resilient amid overall favorable labor market conditions. The moderation occurred as the effects of pandemic-related support programs waned. These programs not only supported consumer finances in previous years but also contributed to excess consumer savings, which declined in 2023 according to various estimates.3 Despite this decline, strong labor market conditions and moderating inflation supported consumer spending overall.

Inflation declined in 2023 but remained above the 2 percent Federal Reserve target, keeping monetary policy tight. After peaking in 2022, inflation moderated in 2023 as supply chain pressures eased, demand for goods and services normalized, and food and energy prices declined. While prices for many components eased, the price of shelter, which makes up a large

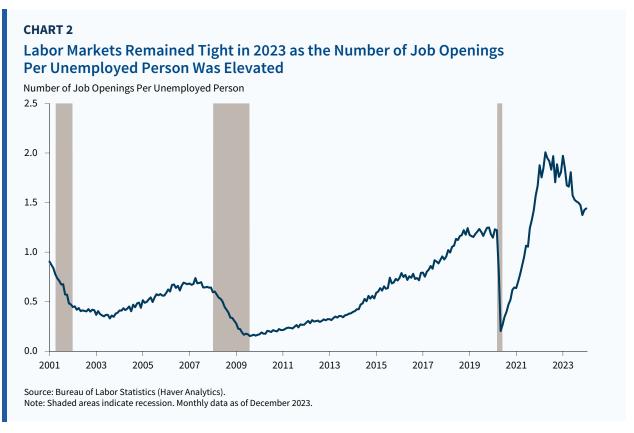
portion of household budgets, remained high (Chart 3). As inflation moderated, the Federal Reserve Federal Open Market Committee (FOMC) slowed the pace of interest rate increases and eventually paused rate hikes in the second half of the year.

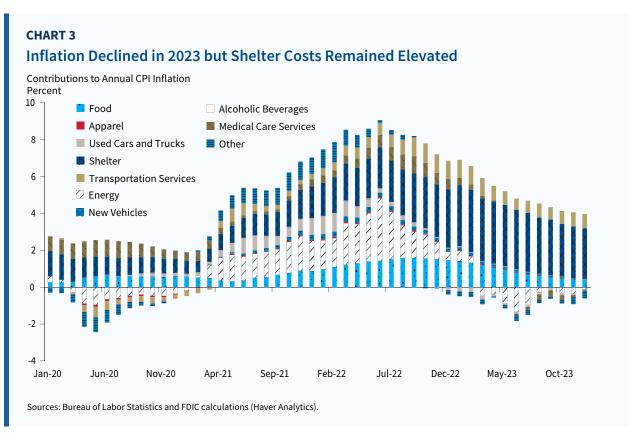
Financial markets were volatile in 2023, but market sentiment and conditions were generally favorable by year-end. Markets began 2023 optimistic that inflation was trending downward, but concerns remained about the prospect of a recession. Bank failures in March initially compounded the market's concerns that tighter credit conditions could lead to a weakening economy. In the second half of 2023, positive signs on inflation and strong economic growth allayed concerns and buoyed market optimism. Improvement in financial market conditions accelerated in the fourth quarter after the FOMC signaled that it was likely finished raising interest rates.

Stocks rebounded in 2023, reversing significant **declines in 2022.** Corporate earnings largely surpassed expectations in 2023, helping drive stock price appreciation throughout the year. Bank stocks underperformed the broader stock market in 2023 due to large price declines in early 2023 after the failures of Silicon Valley Bank and Signature Bank fueled concerns about overall bank liquidity and funding. Though liquidity and funding concerns gradually subsided in 2023, the KBW Bank Index, which consists of 24 large U.S. banks, ended 2023 with a total return of negative 1 percent, while the S&P Financials Sector Index reported a total return of 12 percent.

² Unless otherwise noted, "pre-pandemic" refers to the period first quarter 2015 through fourth quarter 2019.

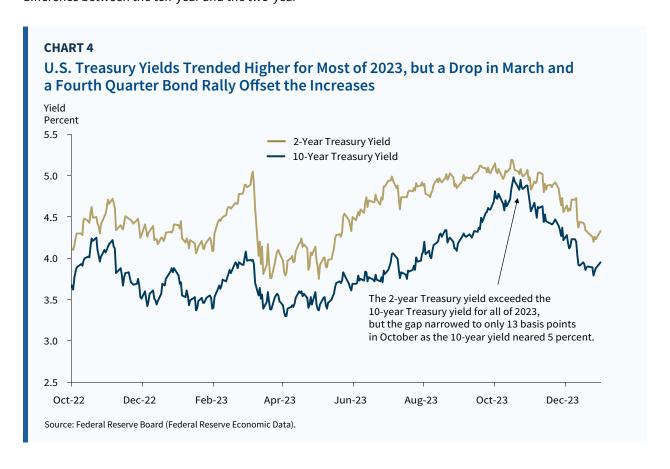
³ See, for example, François de Soyres, Dylan Moore, and Julio Ortiz, "An Update on Excess Savings in Selected Advanced Economies," Board of Governors of the Federal Reserve System, FEDS Notes, December 15, 2023.



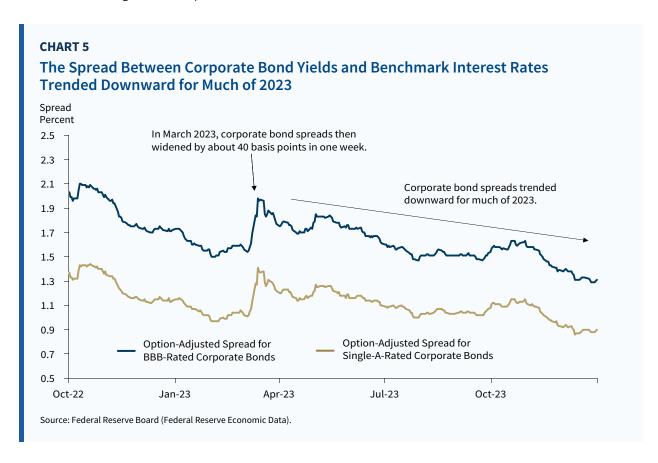


Treasury bond yields increased and declined in 2023, and the yield curve remained inverted throughout the year. U.S. Treasury yields trended higher for most of 2023, aside from a drop in March and a fourth quarter bond rally that reversed the earlier increases (Chart 4). Overall, the ten-year Treasury yield ended 2023 at the same level as at the start of the year, while the two-year Treasury yield declined 18 basis points during the year. The yield curve remained deeply inverted; in June 2023, the difference between the ten-year and the two-year

Treasury yield reached the highest point since 1981 but flattened a bit toward the end of the year. The path of longer-term yields reflected investors' recalibrated views of the future path of interest rates in response to policymaker statements and news about the economic outlook. The reduction in Federal Reserve asset holdings also affected bond markets as the Federal Reserve's securities holdings declined \$920 billion to about \$7.2 trillion in 2023.



The corporate bond market recovered in 2023 as interest rates peaked and bond market volatility tapered. Corporate debt and leveraged loan prices increased with stronger price increases for lower-rated borrowers. Loan prices stabilized and trended higher in late 2023 but remained below the robust levels of 2021.4 Investment-grade bonds produced a total return of 9.4 percent in 2023, and high-yield bonds produced a total return of 11.5 percent. Corporate bond spreads declined from year-end 2022 to year-end 2023 despite widening by about 40 basis points in one week in March following the bank failures that increased market volatility (Chart 5).



⁴ PitchBook LCD.

Banking Performance Overview

- The banking industry's earnings remained high in 2023.
- Net income for community banks declined because of lower net interest margins, higher noninterest expense, higher provisions, and greater losses on the sale of securities.
- · Banks reported substantial changes in deposit composition, liquidity positions, and loan growth in 2023.
- Unrealized losses on securities remained elevated in 2023.
- Bank lending slowed in 2023 but remained positive, and asset quality metrics remained favorable overall.
- Capital ratios increased in 2023.
- The number of problem banks at year-end 2023 represented 1.1 percent of all banks.

Overall, the banking industry was resilient in 2023, recovering well from the stress of bank failures and a self-liquidation in the spring.⁵ The industry's full-year net income was well above pre-pandemic levels, asset quality metrics remained favorable overall, and capital levels increased. Concerns entering 2024 center on deterioration in office property loans, elevated levels of unrealized losses on securities, and continued funding pressures.

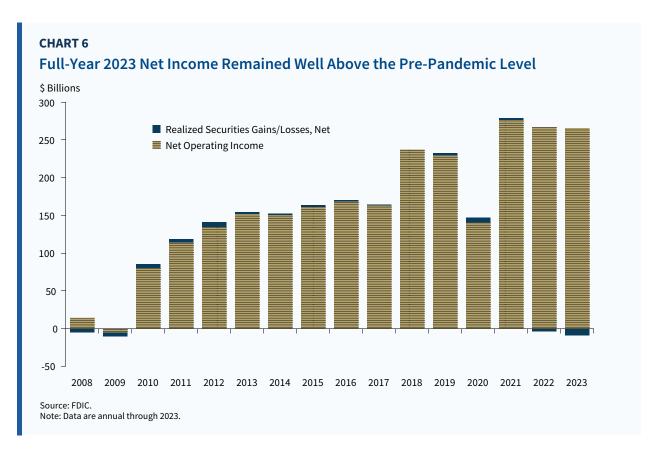
The banking industry's earnings remained high in 2023. The banking industry's net income of \$256.9 billion in 2023 was down \$6.0 billion (2.3 percent) from 2022, but it remained well above the levels reported before the pandemic (Chart 6). The industry's net operating revenue crossed the \$1 trillion mark for the first time since data collection began in 1985, and the full-year net interest margin (NIM) was 3.30 percent, the highest reported margin since 2019. But these positive results were mitigated by higher noninterest expense, provision expense, and realized losses on securities.

The industry's net income in 2023 was driven in part by higher net interest income, up \$64.9 billion, or 10.2 percent from 2022. Banks benefited from a NIM that was 35 basis points higher than the full-year NIM reported in 2022. Noninterest income was also higher by \$14.5 billion (10.2 percent), driven by higher trading revenue and accounting gains on failed-bank acquisitions in the spring. Offsetting these positive

results was provision expense, the amount set aside by institutions to protect against future credit losses; at \$86.3 billion, the industry's 2023 provision expense was 67.2 percent higher than the amount set aside in 2022. Provision expense increased because of higher credit card balances and charge-offs, greater risk in office properties, and increasing delinquency levels across loan portfolios. With the exception of 2020, provision expense was at the highest level since 2010.

Net income for community banks declined because of compressed NIMs, higher noninterest expense, higher provision expenses, and greater losses on the sale of securities. In 2023, community bank net income declined \$2.0 billion, or 7.1 percent, from 2022's level. Community bank NIM was 3.39 percent in 2023, down from 3.44 in 2022. NIM declined as deposit costs rose faster than loan yields. This is in contrast to 2022 when higher interest rates benefited community bank earnings through higher loan yields for most of the year without a commensurate increase in funding costs. Noninterest expenses rose in 2023 due to higher "all other" noninterest expenses and higher compensation expenses. Losses on the sale of securities were also higher as some banks sold securities at a loss to reinvest the proceeds at higher market interest rates.

⁵ On March 8, 2023, Silvergate Bank announced its intent to self-liquidate. On March 10, 2023, Silicon Valley Bank (SVB) was closed by the California Department of Financial Protection and Innovation (CADFPI). Contagion effects from SVB's failure began to spread through traditional media, social media, and short sellers to other banks with perceived similar risk characteristics, notably, those with high levels of uninsured deposits, concentrations of customers in the venture capital and tech industries, and high levels of unrealized losses on securities. Contagion effects initially manifested in large declines in stock prices and then in deposit outflows at certain other banks. For two of these banks—Signature Bank and First Republic Bank—deposit outflows became deposit runs and exposed other weaknesses that could not be overcome, leading to their failure. On March 12, 2023, Signature Bank of New York was closed by the New York State Department of Financial Services (NYSDFS). On May 1, 2023, First Republic Bank was closed by the CADFPI.



Deposit compositions and liquidity positions at banks changed substantially in 2023. Domestic deposits declined 2.1 percent during the year as nonbank alternatives, such as money market funds, reported large inflows. In addition, banks reported a substantial shift from lower-yielding deposit accounts, such as transaction and savings accounts, into higheryielding time deposits. On-balance-sheet liquidity fell in 2023 as the industry reduced securities holdings and pledged securities to secure liquidity lines of credit. See Section III: Market Risks - Liquidity, Funding, and Interest Rate Risk for a more in-depth discussion of deposit trends and liquidity levels.

Total deposits for community banks increased 2.3 percent in 2023 as growth in insured deposits (up 5.7 percent) outpaced the decline in uninsured deposits (down 4.2 percent).

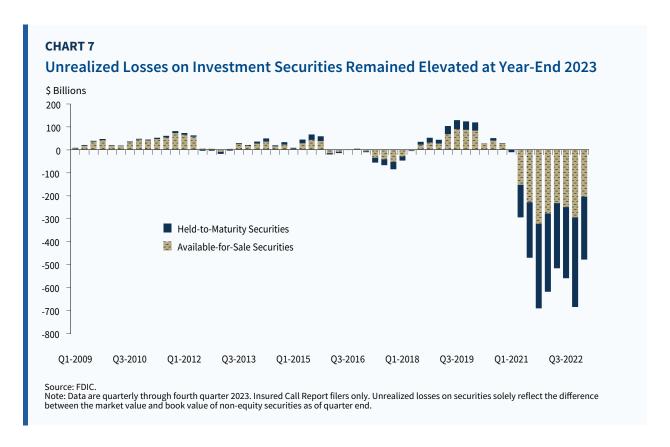
Unrealized losses on securities remained elevated in 2023. The banking industry's share of longer-term loans and securities relative to assets increased to

39.7 percent at year-end 2022 before declining to 37.0 percent in fourth quarter 2023.6 Community banks also reported a decline in fourth quarter from the prior year, from 54.7 percent of total assets, a recent high, to 50.9 percent of total assets. Despite the decline, both industry and community banks' share of longer-term assets to total assets remained above their prepandemic level in fourth quarter 2023. See Chapter 2: Liquidity, Funding, and Interest Rate Risk for more information on the effects of long-term assets on bank NIM performance.

Although the higher level of longer-term loans and securities helped preserve NIMs during the period of lower interest rates, higher interest rates in 2022 and 2023 caused the market values of bonds to decline. At year-end 2023, unrealized losses for available-for-sale and held-to-maturity securities were \$477.6 billion, 22.7 percent lower than the \$617.7 billion reported at yearend 2022 but elevated compared to typical levels (Chart 7).7 As of fourth quarter 2023, the industry's unrealized losses on securities made up 8.5 percent of

⁶ Longer-term loans and securities have maturities greater than three years. Some of the decline is attributable to the lower fair value of available-for-sale securities.

⁷ Unrealized losses on securities reflect the difference between the market value as of quarter-end and the book value of non-equity securities. This calculation does not account for any unrealized gains or losses in "accumulated other comprehensive income" because unrealized gains and losses cannot be derived from Consolidated Reports of Condition and Income (Call Reports) for the industry.



the book value of securities, down from 10.0 percent the previous year. Similarly, community bank unrealized losses on securities made up 9.1 percent of their book value, down from 10.4 percent the previous year.

Unrealized losses on securities present a significant risk should banks need to sell investments to meet liquidity needs, in which case they would have to realize the depreciation into earnings and capital. Even in the absence of liquidity concerns, unrealized losses represent a drag on future earnings as these securities tend to be longer term and fixed rate when interest rates are much higher than when banks purchased the bonds.

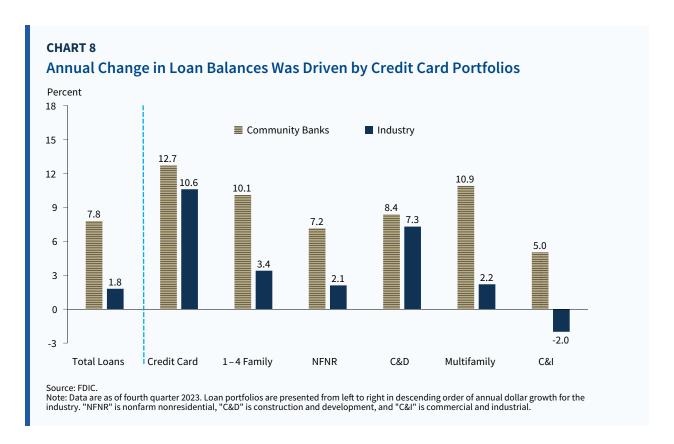
Bank lending slowed in 2023 but remained positive, and asset quality metrics remained favorable **overall.** Bank lending slowed in 2023 as higher interest rates reduced demand and tighter underwriting standards constricted supply.8 During 2023, total loans grew \$225.1 billion, or 1.8 percent, down from 8.7 percent growth in 2022. Growth was driven by credit card loans (up \$107.4 billion, or 10.6 percent), 1-4

family residential mortgages (up \$85.4 billion, or 3.4 percent), and loans to nonbank financial institutions (up \$55.4 billion, or 7.5 percent) (Chart 8).

Community banks reported more robust loan growth than the industry, though their aggregate 7.8 percent loan growth reported in 2023 was down from 14.4 percent reported in 2022. Community bank loan growth was driven by 1–4 family residential loans (up \$41.7 billion, or 10.1 percent), nonfarm, nonresidential loans (up \$38.2 billion, or 7.2 percent), and construction and development (C&D) loans (up \$12.1 billion, or 8.4 percent).

The industry's asset quality metrics remained favorable overall, though noncurrent and net chargeoff rates increased in 2023. The industry's noncurrent rate increased 13 basis points to 0.86 percent at yearend, a level still well below the pre-pandemic average rate of 1.28 percent. But the industry's net charge-off rate almost doubled year over year to 0.65 percent in fourth quarter 2023, higher than its pre-pandemic rate

Board of Governors of the Federal Reserve System, Federal Reserve Senior Loan Officer Opinion Survey on Bank Lending Practices, January 2024.



of 0.54 percent. Higher credit card and auto loan net charge-offs drove the annual increase in the industry's charge-off rate.

Commercial real estate loans, particularly those backed by non-owner-occupied properties such as offices, deteriorated in 2023. Most of this deterioration was evident in the loan portfolios of banks with more than \$100 billion in total assets. This issue is discussed further in Section IV: Credit Risks, Commercial Real Estate.

The community bank noncurrent rate increased 10 basis points from the previous year to 0.54 percent, and the net charge-off rate rose 6 basis points to 0.18 percent. These ratios remained near historical low levels and were much better than pre-pandemic levels.

Capital ratios increased in 2023. The industry's equity capital increased \$90.1 billion (4.1 percent) from the level at year-end 2022. The industry's leverage capital ratio increased 16 basis points from 2022 to 9.14

percent, and its tier 1 risk-based capital ratio increased 28 basis points to 13.92 percent. The average community bank leverage ratio (CBLR) for the 1,618 community banks that elected to use the CBLR framework was 12.18 percent, up 28 basis points from 2022.

The number of problem banks at year-end 2023 represented 1.1 percent of all banks. The number of banks on the FDIC's "Problem Bank List" increased from 39 at year-end 2022 to 52 at year-end 2023.9 Despite the increase, problem banks represented 1.1 percent of all banks, near the low end of the typical range of 1 to 2 percent of all banks during non-crisis periods. Total assets held by problem banks increased from \$47.5 billion at year-end 2022 to \$66.3 billion at year-end 2023. Five banks failed in 2023, the first failures since October 2020.

⁹ Banks on the FDIC's Problem Bank List have a CAMELS composite rating of "4" or "5" due to financial, operational, or managerial weaknesses, or a combination of such issues.



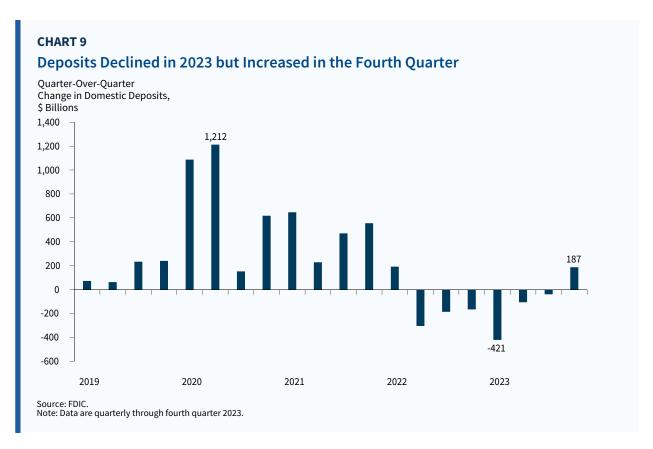
SECTION 3 Market Risks

Liquidity, Deposits, and Funding

- Deposits declined in 2023, with the largest declines occurring during the banking sector stress early in the year. Uninsured deposit balances drove the decline in total deposits, while insured deposits increased.
- · Shifts in deposits toward higher-yielding accounts put upward pressure on interest expense.
- · The industry's on-balance-sheet liquidity declined in 2023 as banks reduced securities holdings and increased securities pledged to secure liquidity lines of credit.
- · Liquid assets at community banks declined in tandem with strong lending, and community banks were more reliant on wholesale funding than before the pandemic.

Deposits declined in 2023, with the largest declines occurring during the banking sector stress early in the year. Industry domestic deposits fell \$380 billion, or 2.1 percent, in 2023. Domestic deposits declined for six consecutive quarters through third quarter 2023 before increasing in the fourth quarter (Chart 9).

The stress in the banking system in first quarter 2023 accelerated the outflow of deposits that quarter after the decelerating trend reported in the second half of 2022.

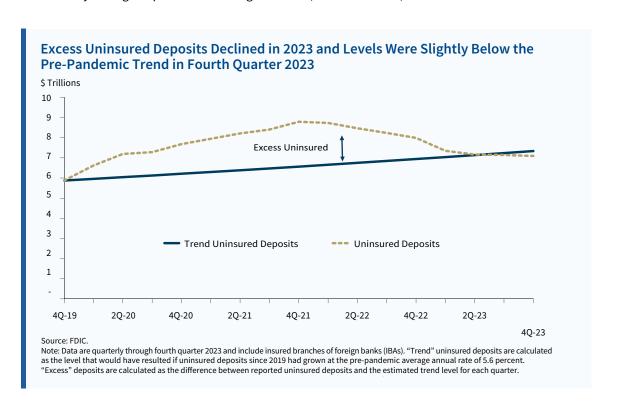


The decline in deposits was driven by a reduction in uninsured deposits from high levels reported during the pandemic (see Box A). In 2023, uninsured deposits declined \$897 billion, while insured deposits grew \$517 billion.

The decline in aggregate deposits largely reflected outflows of uninsured deposits at banks with more than \$100 billion in assets. Banks with assets between \$10 billion and \$100 billion also lost deposits in 2023 but resumed growth in the second quarter after reporting large outflows in the first quarter. Deposits at banks with less than \$10 billion in assets, a group that includes most community banks, had slight deposit growth throughout most of 2022 and 2023. All size groups reported deposit growth in fourth quarter 2023.

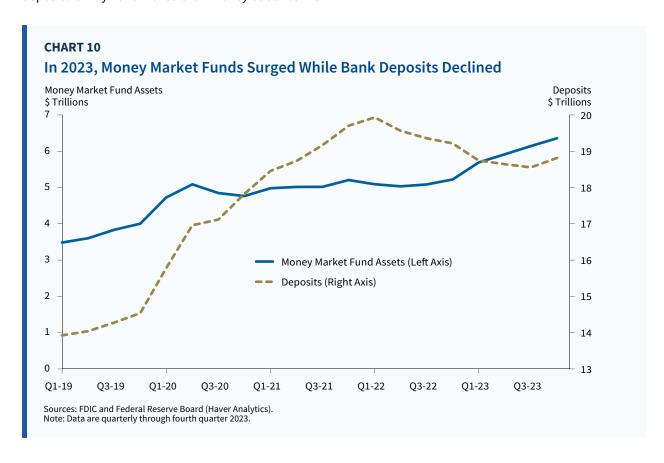
Box A

Beginning in 2020, uninsured deposits grew significantly beyond the average rate reported before the pandemic. Total uninsured deposits began to decline as the inflows received early in the pandemic receded, and the decline accelerated in first quarter 2023 after two bank failures resulted in heightened investor attention to insured deposits. By third quarter 2023, excess uninsured deposits accumulated by the industry during the pandemic no longer existed (see chart below).



Shifts in deposits toward higher-yielding accounts put upward pressure on interest expense. High interest rates in 2023 drove many depositors to seek higher yields on their deposits. Banks reported deposit shifts from lower-yielding deposit accounts, such as transaction and savings accounts, to higher-yielding time deposits. Time deposits accounted for 26 percent of median bank deposits at year-end 2023, up from 19 percent at year-end 2022. In addition, some bank depositors may have moved their money out of banks

in search of higher yields; in 2023, money market fund assets under management increased \$1.1 trillion, while total bank deposits decreased \$401 billion (Chart 10). As deposits declined, banks raised deposit interest rates to retain deposits and relied on more expensive nondeposit liabilities. As a result, the industry's cost of funding earning assets increased from 0.55 percent in 2022 to 2.13 percent in 2023.

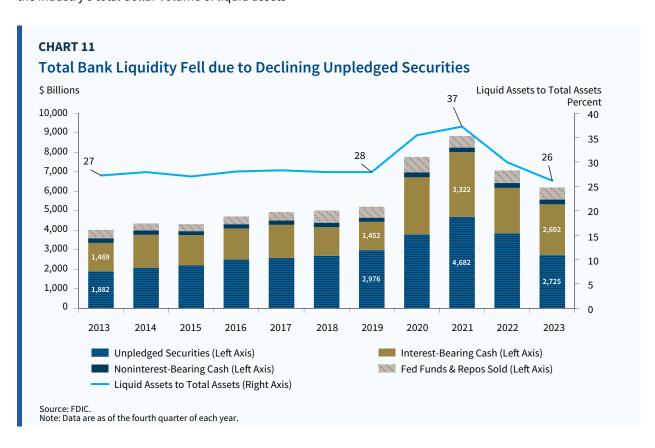


On-balance-sheet liquidity declined in 2023 as banks reduced securities holdings and pledged more securities to liquidity lines of credit. Because bank deposits surged in 2020 and 2021, most banks reported high levels of on-balance-sheet liquid assets, such as cash and securities, at the beginning of 2022. But as a result of rapidly rising interest rates in 2022 and 2023 and the resulting impact on deposits, the industry's on-balance-sheet liquidity levels fell. In 2023, total liquid assets declined \$873 billion after falling \$1.8 trillion in 2022.10 The decline in 2023 was largely driven by bond sales and increased securities pledged to obtain contingency lines of credit. While the industry's total dollar volume of liquid assets

remained above 2019 levels, the ratio of on-balancesheet liquid assets to total assets ended 2023 at 26 percent, below the pre-pandemic level of 28 percent (Chart 11).

In response to declining on-balance-sheet liquidity levels, many banks turned to higher-cost borrowings to cover anticipated liquidity needs.

The industry's use of wholesale sources to fund assets fell dramatically in 2020 and 2021, but the industry turned back to these sources in 2022 and 2023. This pivot to borrowings was particularly true in the first half of 2023 as banks secured precautionary excess



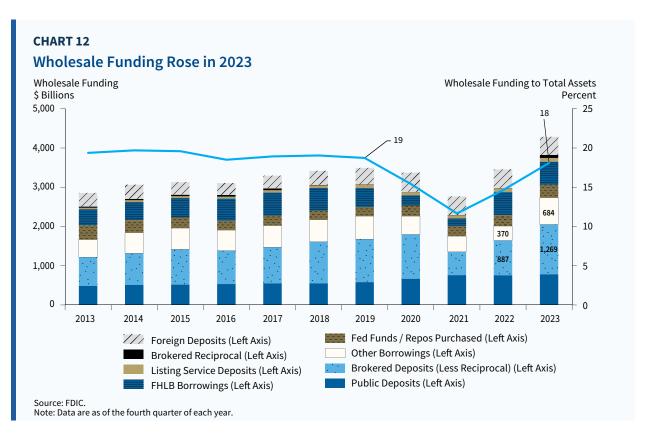
¹⁰ Liquid assets include interest-bearing and noninterest-bearing deposits, fed funds sold, reverse repurchase agreements, and the fair value of available-for-sale and held-to-maturity securities less the value of pledged securities. Pledged held-to-maturity securities are listed at amortized cost in the Call Report, so this measure may understate bank liquid assets when pledged bonds have depreciated below amortized cost.

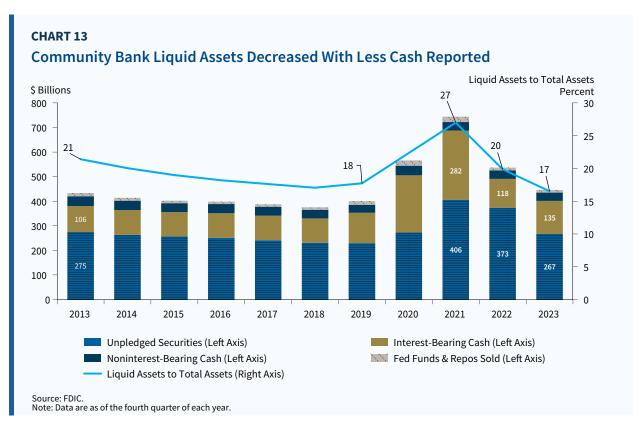
funding in response to fears of a potential widespread banking crisis. As conditions improved, the increase in wholesale funding moderated during the second half of the year. But wholesale funding increased to near pre-pandemic levels in 2023, reaching \$4.3 trillion, or 18 percent of total assets (Chart 12). Wholesale funding growth was led by an increase in brokered deposits (both reciprocal and non-reciprocal) and non-Federal Home Loan Bank (FHLB) borrowings such as Bank Term Funding Program loans. Banks reported a slight decline in FHLB borrowings in 2023 after reporting a \$399 billion increase in 2022.

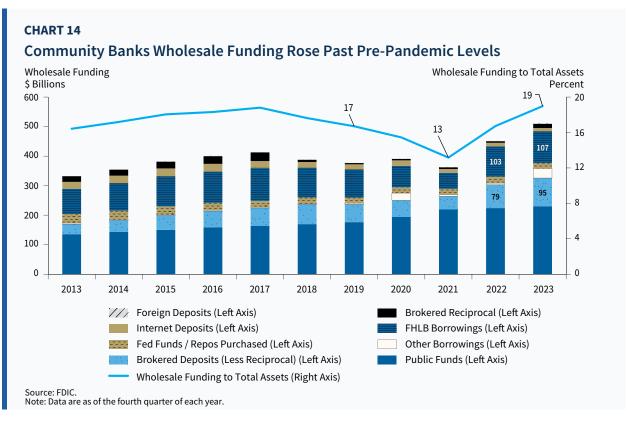
Liquid assets at community banks declined in tandem with strong lending, and community banks were more reliant on wholesale funding than before the pandemic. Although deposits at community banks increased in 2023, loan growth outpaced deposit growth, which required community banks to reduce liquid assets and increase use of wholesale

funding. Similar to the industry as a whole, community banks pledged a significant amount of bonds to secure additional borrowing lines and sold bonds in 2023. Community banks also continued to increase wholesale funding. As a result, on-balance-sheet liquid assets fell to 17 percent of total community bank assets (from 18 percent in 2019), the lowest year-end level since 2008. Wholesale funding levels increased to 19 percent from 17 percent, matching the recent peak in 2017 (Charts 13 and 14).

In 2024, tighter liquidity positions and higher reliance on wholesale funding will increase funding risk for some banks should market stress or rapid changes in market conditions occur. Even if market interest rates decline in 2024, banks with low liquidity positions, higher unrealized securities losses, insufficient access to off-balance-sheet secured borrowing lines, or volatility in deposit retention may continue to experience heightened liquidity pressure.





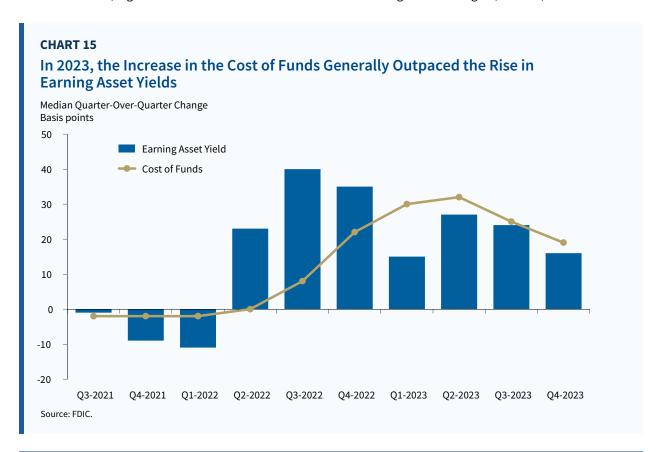


Net Interest Margins and Interest Rate Risk

- · The banking industry's median net interest margin increased in 2023 despite rising funding costs.
- · Net interest margin changes varied by bank asset size; the margin at the smallest community banks was higher than the rest of the industry.
- · Interest rate risk remained high at community banks as they continued to hold an elevated share of longterm assets, but some community banks began to sell off lower-yielding securities to reinvest at higher
- Net interest margin compression contributed to a small but rising share of unprofitable community banks in 2023.
- An increase in the share of profitable community banks whose net interest margins have fallen below 2 percent suggests a widening of weakness in the industry.

Interest rates remained elevated in 2023, resulting in both higher net interest incomes and higher funding costs. Sharply higher interest rates in 2022 and 2023 after years of near-zero rates had a significant impact on bank profitability, especially through the effect on asset yields and the cost of funds. Because loan yields initially tend to rise more quickly than deposit costs in a rising interestrate environment, higher interest rates in 2022 led to a

higher full-year median NIM, along with aggregate net interest income that rose to above pre-pandemic levels.11 But in 2023, median quarterly funding costs increased faster than yields, reversing some of the large gains in NIM that occurred in 2022. Most of the NIM compression occurred in the first half of 2023, as compression slowed in the second half of the year when the increases in yields and funding costs converged (Chart 15).



¹¹ Aggregate figures for the industry are heavily weighted toward the performance of the largest banks. To take a deeper look into bank-specific issues and trends without the outsize effects of the largest banks, this chapter analyzes median ratios.

The banking industry's median NIM increased in 2023 despite rising funding costs, but bank-level performance was far more dispersed in 2023 than

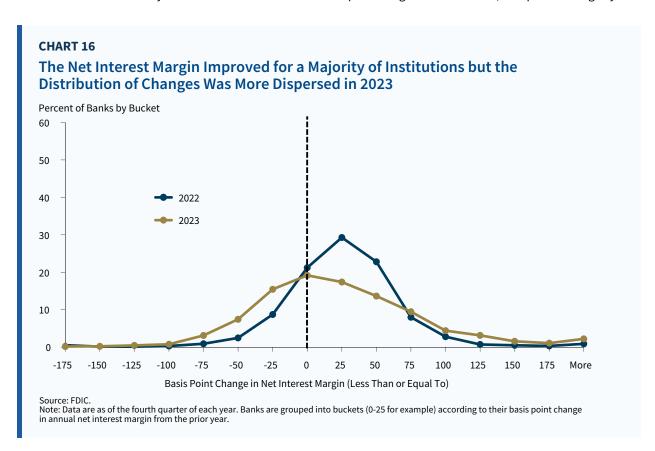
it was in 2022. The median full-year NIM among all banks increased 7 basis points to 3.45 percent in 2023. This was slightly lower than the 11 basis point increase in 2022, which was the highest annual increase since 2002. However, only 53 percent of banks reported an increase in NIM in 2023 compared to 66 percent in 2022. Even more notable was the increased dispersion in NIMs between the two years. The share of banks with a 75 basis point or higher increase in NIM more than doubled to 12.6 percent, while the share of institutions with a 75 basis point decline in NIM also more than doubled to 4.8 percent (Chart 16).

Higher interest rates continued to support higher earning asset yields in 2023. Noncommunity banks were able to take better advantage of higher rates on assets than community banks because of their

greater volume of short-term assets (Chart 17).12 On the funding side, driven by both higher interest rates paid and a shift to interest-bearing deposits, the median cost of funds for all banks also continued to increase throughout 2023, rising to its highest level in more than a decade.13 Although both community and noncommunity banks reported rising cost of funds, noncommunity banks generally reported higher increases in 2023 than community banks (Chart 18).

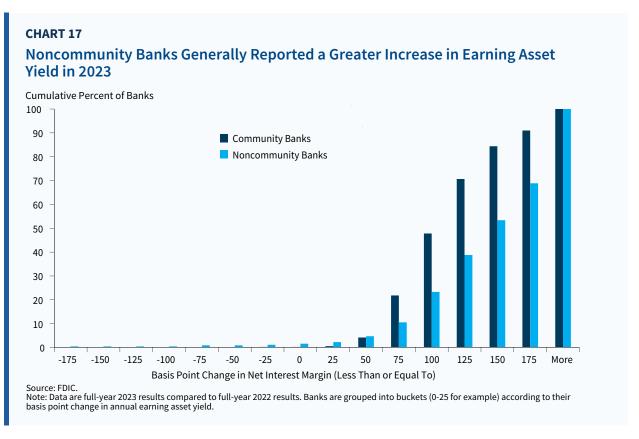
NIMs increased more among smaller community

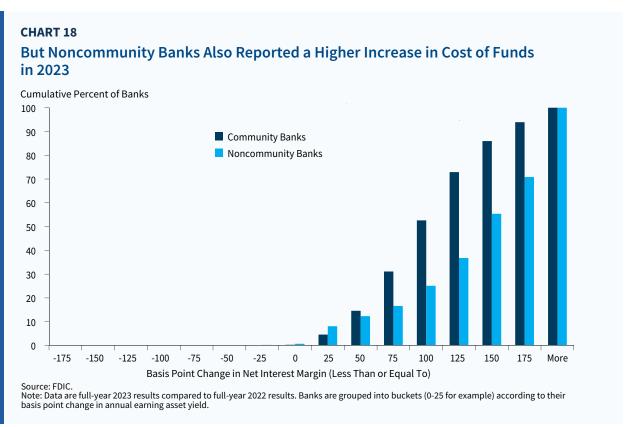
banks. In 2023, a majority of community banks with assets of \$1 billion or more (referred to as large community banks in this chapter) reported a decline in NIMs, while a majority of smaller community banks (those with assets under \$1 billion) reported an increase in NIMs. This was particularly true at the smallest community banks: More than 70 percent of community banks with less than \$100 million in assets reported higher NIMs in 2023, compared to slightly



¹² As of year-end 2023, the median noncommunity bank ratio of short-term assets (cash and balances due from depository institutions, fed funds and repos sold, and loans and securities maturing in one year or less) to total assets was 34.3 percent, compared to 27.3 percent at community banks.

¹³ The median share of deposits in interest-bearing accounts began to fall significantly during the pandemic before reaching a low of 73.7 percent in third quarter 2022. Since then, the share of interest-bearing deposits has begun to revert to the longer-term average, reaching 76.9 percent in fourth quarter 2023. This remains below the 2017 to 2019 average of 79.5 percent.





over half of community banks with assets between \$100 million and \$1 billion. 14 In contrast, only slightly more than one-third of larger community banks reported NIM improvement (Chart 19).

Smaller community banks reported slightly lower increases in earning asset yields in 2023 than did larger community banks, but they also reported much smaller increases in funding costs. The difference in funding costs was especially pronounced at the smallest community banks. Strong liquidity levels enabled the smallest banks to keep funding costs in check even though, as a result, they reported deposit outflows while other community banks reported deposit growth. 15 Conversely, large community banks relied more heavily on borrowings and reported the largest increase in interest-bearing deposits during 2023, contributing to much higher increases in their cost of funds. 16 The increase in the cost of funds at large community banks outpaced the increase in earning asset yields, driving the median NIM lower.

Community banks continued to hold an elevated share of long-term assets, but some banks began to sell off lower-yielding securities to reinvest at **higher rates.** The median ratio of long-term assets to total assets at community banks declined from a peak of 54.9 percent at year-end 2022 to 50.2 percent at year-end 2023, still well above the pre-pandemic (year-end 2019) level of 44.0 percent. The higher share of long-term assets may constrain NIM growth as these assets will not reprice in tandem with higher funding costs. At the median, more than a quarter of long-term assets held by community banks are securities, many of which may have unrealized losses as market rates have risen. Notably, more than 30 percent of community banks reported a realized loss on securities in 2023 as they sold securities to reinvest the proceeds at higher rates.

NIM compression contributed to a small but rising share of unprofitable community banks in 2023. As of year-end 2023, the share of unprofitable community banks increased to 5.2 percent, up from 3.5 percent

at year-end 2022. NIM compression contributed to the rising number of unprofitable institutions. More than three quarters of community banks that were profitable in 2022 but unprofitable in 2023 reported NIM compression in 2023.

Despite an increase in earning-asset yields in 2023 that were relatively in line with the industry, unprofitable community banks reported a larger increase in the cost of funds than did profitable community banks. At unprofitable community banks, the median increase in the cost of funds was 125 basis points, compared to the median increase of 96 basis points at profitable community banks. Increased reliance on other borrowed funds relative to total liabilities contributed to the higher cost of funds for these banks. While the banking industry overall reported a greater reliance on other borrowings, the share of other borrowed funds to total liabilities and the degree of the increase were higher among unprofitable community banks than the industry.

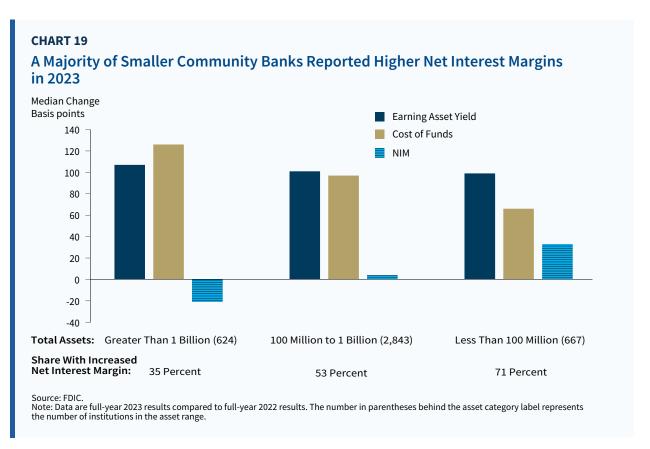
Another factor that contributed to the growing share of unprofitable community banks in 2023 was losses on securities sales. In 2023, 17 institutions that were unprofitable would have been profitable had it not been for losses on securities sales. As noted previously, some banks incurred losses related to balance sheet restructuring in 2023 to reinvest at higher interest rates, which may contribute to higher earning asset yields in 2024.

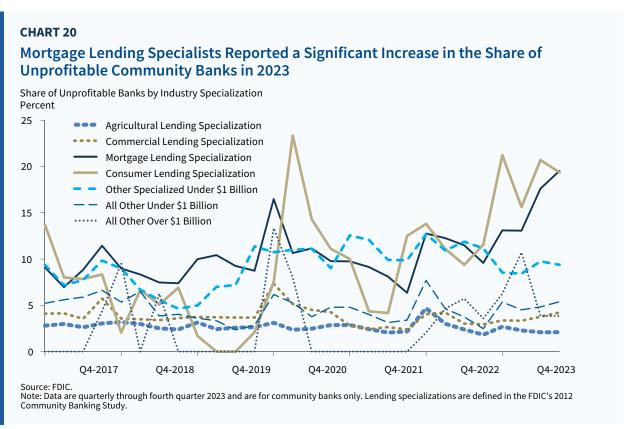
The type of lending that community banks specialize in was also an important factor in determining whether a community bank was unprofitable in 2023. Among all lending specialists, community bank mortgage lending specialists were most likely to be unprofitable. The share of community bank mortgage lending specialists that were unprofitable rose to 19.5 percent as of fourth quarter 2023, up from 9.6 percent as of year-end 2022 (Chart 20). Mortgage lending specialists accounted for more than a quarter of all unprofitable community banks despite representing 7.1 percent of all community banks.

¹⁴ At the median, the smallest community banks reported annual NIM improvement of 33 basis points in 2023, while all other community banks reported no change at the median.

¹⁵ The median on-balance-sheet liquidity level at the smallest banks was 29.3 percent, higher than the community bank median of 18.2 percent as of fourth quarter 2023. The slower increase in the cost of funding led to deposit run-off throughout the year for these banks. At the median, the smallest community banks reported deposit declines of 2.0 percent from a year earlier, compared to a median increase of 0.7 percent for all community banks.

¹⁶ At the median, large community banks reported a cost of funds increase of 126 basis points in 2023 compared to year-end 2022, outpacing the median 92 basis point increase for all other community banks.





Mortgage lending specialists typically hold some of the most elevated shares of long-term assets and therefore reported the weakest median increase in earning asset yields (70 basis points) among lending specialist groups in 2023. Meanwhile, a rising share of other borrowed funds, combined with a high reliance on interest-bearing deposits, contributed to the cost of funds rising faster than earning yields, driving the median NIM down 13 basis points at mortgage lending specialists. As a result of the NIM compression, the median NIM of 2.87 percent at mortgage lending specialists was the lowest of all lending specialist groups in 2023.

An increase in the share of profitable community banks whose net interest margins have fallen below 2 percent suggests a widening of weakness in the industry. The share of profitable community banks with NIMs below 2 percent (a level considered historically low) increased to 1.7 percent in 2023 from 0.9 percent in 2022. These institutions were more affected by increasing funding costs while interest rates rose because they tended to be more reliant on interest-bearing deposits than the broader industry.

Further, these institutions used a much higher share of borrowings to total liabilities than did other institutions in 2023. As a result, the cost of funds at these institutions increased a median 135 basis points in 2023, outpacing the median increase of 95 basis points at all other community banks.

The increase in earning asset yields at these institutions also trailed that of the broader industry as they generally hold a higher share of longer-term assets. At community banks with NIMs below 2 percent, the median share of long-term assets was 58.3 percent as of fourth quarter 2023, higher than the median 49.7 percent at all other community banks.

Although these institutions remained profitable in 2023, their median return on assets of 0.27 percent was relatively low, making them more susceptible to earnings challenges should asset quality weaken and provision expenses increase. Indeed, these earnings challenges affected these institutions when economic and credit quality conditions were generally favorable.

SECTION 4 Credit Risks

This chapter assesses the various areas of bank credit risk, ranging from commercial real estate lending to nonbank lending. It is organized by credit area, ordered by the level of exposure and risk to the

banking industry, community banks in particular. Each section begins with an analysis of economic and operating conditions, followed by an assessment of bank exposure and credit quality.

Commercial Real Estate

- · Markets for most major commercial real estate (CRE) property types were resilient in 2023, but the markets for office and retail malls were weak.
- The banking industry remained active in CRE lending in 2023, and CRE loan exposure remained elevated, particularly among midsize banks.
- · CRE loan quality overall remained favorable at year-end 2023, but weakness emerged, particularly among large bank CRE loan portfolios.
- The amount of CRE loans scheduled to mature through 2026 remains elevated. Amid high interest rates, softening property values, and emerging credit weakness, the ability to refinance CRE loans remains a challenge to the banking industry.

Markets for most major CRE property types were resilient in 2023, but the office sector struggled and faces notable headwinds in 2024. Net absorption of office space was negative for the fourth straight year in 2023, which means that more office space was vacated than was newly leased. Demand for space was particularly weak in the largest U.S. office markets, reflecting in part the continuation of remote work and slow return to office in many cities.¹⁷ Net absorption fell more than three times more sharply in the largest markets than in smaller markets in 2023.18 Negative net absorption contributed to an increase in the U.S. office vacancy rate from 12.4 percent in fourth quarter 2022 to 13.5 percent in fourth quarter 2023.19 In the largest U.S. markets, the vacancy rate increased from 13.2 percent to 14.6 percent during that time, while

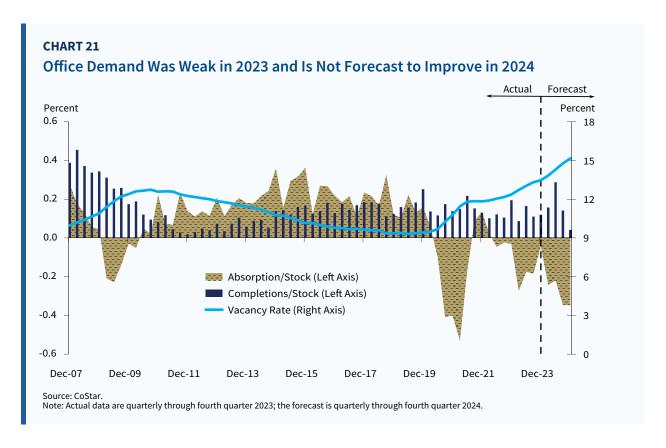
the vacancy rate in smaller markets increased from 5.4 percent to 5.6 percent. Industry forecasts expect weak demand for office space and a continued rise in vacancy in 2024 (Chart 21).

Challenges for other property types were more modest in 2023, but headwinds may emerge in **2024.** Demand for multifamily units benefited from relatively low single-family home affordability, which may have kept many would-be homebuyers in the rental pool. Also, slowing rent growth contributed to improved apartment leasing. Nonetheless, demand for multifamily housing has not kept up with strong supply growth in recent years, which was triggered in part by pandemic-era demand and migration trends. Construction has been particularly strong in Sunbelt

¹⁷ According to Kastle Systems' "Back to Work Barometer" and University of Toronto cell phone tracking data, office attendance remains below pre-pandemic levels in many large cities.

¹⁸ The largest markets are the 20 largest office markets in the country by inventory.

¹⁹ Unless otherwise noted, CRE data are from CoStar as of fourth quarter 2023.



and Pacific Northwest markets, many of which have had strong population growth. Likely reflecting increased supply in many markets, multifamily property prices declined approximately 10 percent in 2023 and are expected to decline slightly less in 2024.

Industrial properties benefited from ongoing demand for warehousing and distribution services. Of the major property types, industrial had the highest rent growth at more than 6 percent in 2023. Due to these conditions, the pace of industrial construction remained at a multi-cycle high, with 32 percent more space added in 2023 than in 2022. Substantial construction contributed to an increase in the industrial vacancy rate in 2023, albeit from low levels.

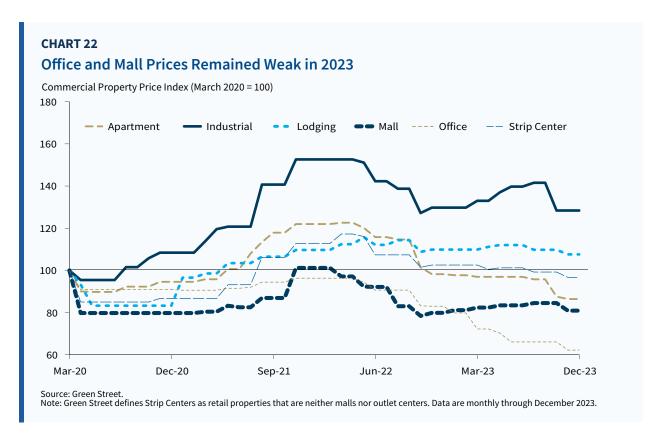
The retail property sector performed well in 2023. The U.S. vacancy rate on retail properties dropped to a 16year low of 4.0 percent, and retailers were on track to open more stores than they closed in 2023. Very little new space was added in recent years, and demand easily kept pace with completions. The weak link in the retail sector is mall space, which has struggled

with elevated supply of obsolete malls since before the pandemic. At nearly 8.5 percent, mall vacancy was more than twice that of the rest of the retail sector.

Reflecting varying conditions across property sectors in 2023, price performance also varied.

Most notably, office building prices were soft amid weak demand for space. Retail mall prices also were weak (Chart 22). Following several years of rising interest rates, a more stable rate environment may bolster CRE conditions by year-end 2024. Some sectors, like office, will likely take time to recover. Lower property valuations could have implications on CRE asset quality by hindering a borrower's ability to refinance or repay a CRE loan.

CRE loan exposure remained elevated among the nation's banks. CRE loans held by banks grew for the 43rd consecutive quarter, reaching a record of more than \$3.1 trillion in fourth quarter 2023. However, loan growth generally slowed in 2023 amid CRE market headwinds, tighter underwriting standards, higher interest rates, and lower loan demand.



As of fourth quarter 2023, loans for nonfarm nonresidential real estate properties comprised the majority (\$1.8 trillion or 58 percent of total CRE loans) of the banking industry's CRE loan portfolio. The remaining CRE loans were multifamily loans (\$612 billion or 19 percent), C&D loans (\$502 billion or 16 percent), and other CRE loans (\$211 billion or 7 percent). Other than multifamily loans, banks do not report CRE loans by collateral type (for example, office properties) on Consolidated Reports of Condition and Income (Call Reports).

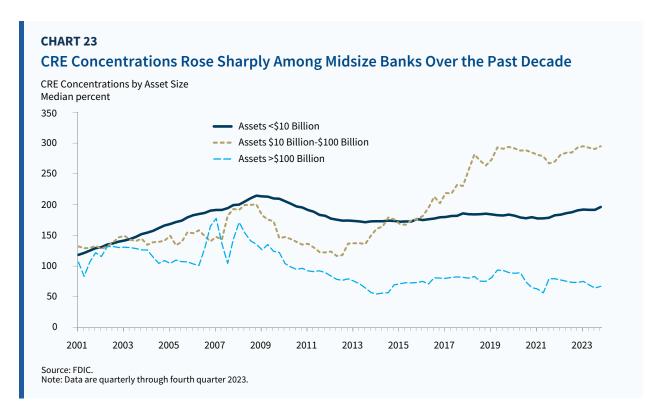
Bank balance sheets continued to reflect substantial holdings of CRE loans in 2023. The banking industry's median CRE concentration increased to 198 percent as of fourth quarter 2023, up nearly 6 percentage points from the year before but down from the peak of 214 percent reached in 2008. As of fourth quarter 2023, 28 percent of banks reported an elevated concentration of CRE loans, down from 35 percent in 2008.²⁰

Nearly all banks, regardless of size, participate in CRE lending to some degree. However, CRE concentrations among banks with \$10 billion to \$100 billion in total assets have expanded significantly from the 2009 cycle. This size group has a higher median CRE loan concentration than larger and smaller size groups (Chart 23). Concentrations among smaller banks, 93 percent of which are community banks, remained relatively constant over the past decade.

CRE credit quality remained generally favorable, but rising delinquencies create uncertainty. The median CRE loan delinquency rate among all FDICinsured banks remained near historically low levels at 0.22 percent as of year-end 2023 but has increased for two consecutive quarters. For banks with an elevated CRE concentration, the median past-due rate of 0.25 percent also increased in recent quarters. While CRE credit quality remained favorable, some banks increased provisions for potential deterioration in CRE loans.

The increasing trend in CRE loan delinquencies was distinctly more pronounced among the largest banks, banks with assets greater than \$100 billion, which experienced a sharp rise in nonfarm nonresidential

²⁰ In this report, all loan concentration ratios use tier 1 capital and credit loss reserves for loans and leases in the denominator. Banks with elevated concentrations of CRE loans are those banks with concentrations of 300 percent or more.



loan delinquencies, the category that includes office loans (Chart 24). The sharp rise in delinquencies among these institutions was mitigated by the fact that CRE loans represent a much smaller share of loans among the largest institutions. Community banks, which typically have less than \$10 billion in assets, continued to report low CRE loan delinquency rates in the aggregate.

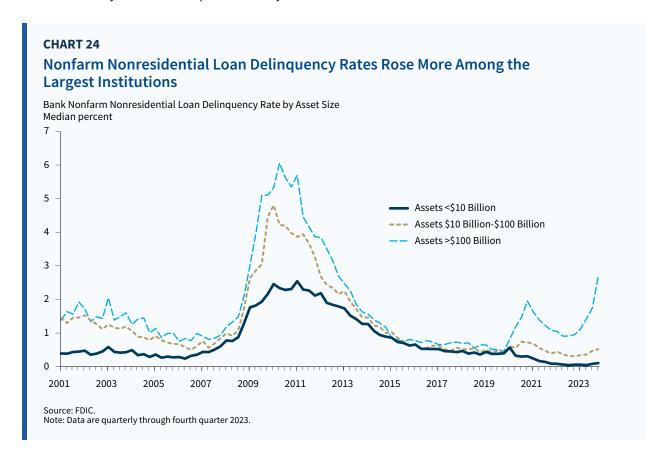
Loan delinquency rates for commercial mortgagebacked securities (CMBS) rose more noticeably than delinquency rates at banks last year. The overall CMBS loan delinguency rate reached 4.7 percent in February 2024, up from 3.1 percent the year before. The office sector accounted for much of the increase, as the office loan delinquency rate more than tripled

from the year before to 6.7 percent (Chart 25). Office loans are the largest category of non-agency CMBS, making up more than one-quarter of the total. Banks hold \$393 billion in CMBS exposure; however, bank exposure to the office sector through CMBS is minimal. Securities issued by U.S. agencies or governmentsponsored enterprises account for 85 percent of the banking industry's CMBS exposure—substantially all of which is backed by multifamily properties.

Refinancing of CRE loans could be challenging for **some borrowers.** The rising trend in delinquencies, coupled with softening collateral values, could weaken CRE loan portfolios, particularly from loans coming due during this period of higher interest rates. Borrowers could face difficulties refinancing

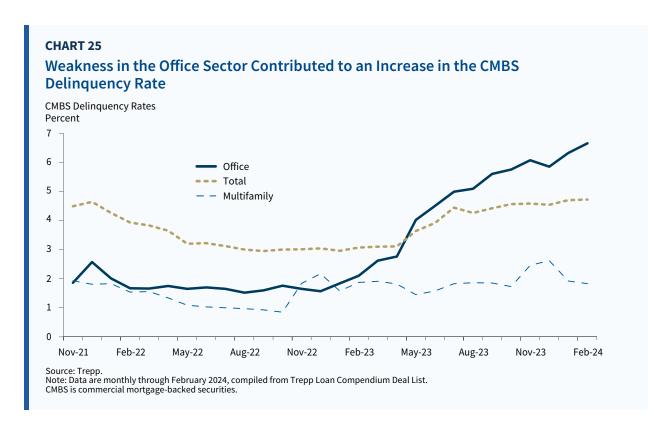
CRE properties due to higher borrowing costs, which affect repayment capacity, and lower collateral values, two essential components considered by lenders. An estimated \$1.6 trillion in CRE loans mature between 2024 and 2026. More than half of these maturing CRE loans are held by banks and are predominantly loans

to finance nonfarm nonresidential properties, which include office loans.²¹ Large office loans (loans over \$100 million) had the lowest refinance success rate among CRE loans in 2023, likely reflecting weak office conditions in larger markets—a trend likely to continue in 2024.22



²¹ Trepp, Commercial Mortgage Maturities, Third Quarter 2023.

²² Moody's Analytics, CRE Office Loan Maturity Monitor, "Office Borrowers Still Struggling for Takeouts; Also Time to Worry About Multifamily?" October 25, 2023.



Overall, though CRE credit quality was resilient in 2023, weak office space demand and rising borrowing costs in the higher rate environment are likely to weigh on CRE performance in 2024. In anticipation of potential stress in the sector, the FDIC, together with other regulatory agencies, issued the "Policy Statement on Prudent Commercial Real Estate Loan Accommodations and Workouts" in 2023.23 The FDIC also issued a Financial Institution

Letter in December 2023 that conveys key risk management practices for institutions to consider in managing CRE loan concentrations in a challenging economic environment and the importance of effectively managing liquidity and funding risks.24 Both publications promote working prudently and constructively with creditworthy borrowers during times of financial stress, retaining sufficient capital, and ensuring appropriate credit loss allowance levels.

²³ FDIC, Interagency Policy Statement on Prudent Commercial Real Estate Loan Accommodations and Workouts, FIL-34-2023, June 29, 2023.

²⁴ FDIC, <u>Advisory: Managing Commercial Real Estate Concentrations in a Challenging Economic Environment</u>, FIL-64-2023, December 18, 2023.

Residential Real Estate

- · High mortgage rates contributed to a slowdown in housing activity in 2023, as the supply of homes for sale remained tight.
- Home prices increased and contributed to a decline in affordability in 2023, especially for first-time homebuyers.
- · While mortgage originations declined industrywide, community banks remained an important source of residential mortgages.
- Credit quality in bank 1-4 family residential loan portfolios remained sound, but early signs of stress emerged, especially at community banks.

Higher mortgage rates contributed to a decline in home sales in 2023. After increasing sharply in 2022 from historic lows, mortgage rates remained higher through fourth quarter 2023. The average rate on a 30-year fixed-rate mortgage exceeded 7 percent during much of fourth quarter 2023, more than twice the rate at the beginning of 2022.25 The sharp increase in mortgage rates in 2022 and 2023 curtailed buyer purchasing power and contributed to a slowdown in total home sales (Chart 26). Total single-family home sales (existing and new combined) were down 15.5 percent in 2023 from a year earlier.26 Existing singlefamily home sales, which represent nearly 85 percent of total home sales, declined more than 18 percent in 2023 from a year earlier and remained well below levels in the years leading up to the pandemic.²⁷

Reduced sales of existing homes largely reflected the desire of homeowners with fixed-rate mortgages below current market rates to stay in their homes and retain favorable mortgage terms. According to Freddie Mac, an estimated 60 percent of homeowners had a mortgage with a rate below 4 percent as of December 2023.²⁸ New single-family home sales increased 3.9 percent in 2023 from a year earlier, partially offsetting declines in existing home sales.29

Home prices increased and contributed to a decline in affordability in 2023, especially for first-time **homebuyers.** Home price growth resumed in 2023 after several months of declines in 2022. Fueled in part by a limited inventory of homes for sale, the S&P Case-Shiller House Price Index began to increase quarter over quarter in second quarter 2023, growing 1.6 percent, following three sequential quarterly declines of about 1 percent or less. 30 By fourth quarter 2023, the index had recouped recent losses and was 5.1 percent above the level of a year earlier.

Home affordability declined even further in 2023 following cumulative increases in home prices in previous years. The National Association of Realtor's Housing Affordability Index (Index) declined to 95.8 in fourth quarter 2023 from the year-earlier level of 103.4, after the third quarter index level reached the lowest point since the 1980s when mortgage rates were double digits. First-time homebuyers remained particularly constrained by low affordability, with the index for first-time buyers at 63.5 in fourth guarter 2023; this measure was also close to its lowest point since the 1980s and below the year-earlier level of 68.4.31

²⁵ According to the Freddie Mac Mortgage Market Survey, the 30 year-fixed weekly mortgage rate was 3.22 percent as of January 6, 2022.

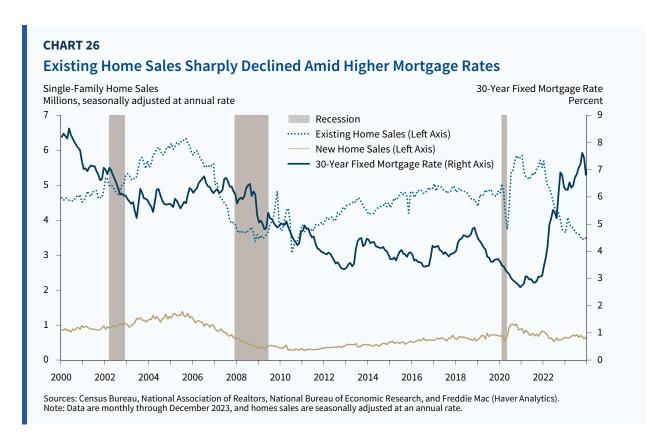
²⁶ National Association of Realtors, U.S. Census Bureau.

²⁷ National Association of Realtors.

²⁸ Freddie Mac, Economic, Housing, and Mortgage Market Outlook, December 2023.

³⁰ Price growth was not uniform across the country. Among 20 major metro areas tracked by Case-Shiller, most posted annual price growth as of fourth quarter, except Portland, which had a small annual price decline. Similarly, among states measured by the Federal Housing Finance Agency Purchase-Only index, prices increased annually as of fourth quarter except in Hawaii and the District of Columbia.

³¹ The National Association of Realtors Affordability Index is calibrated so that a reading above 100 indicates that the median income is more than enough to qualify for a mortgage loan on a median-priced home with a down payment of 20 percent: an index above 100 conveys affordability, while an index below 100 conveys unaffordability. Haver Analytics-adjusted values from monthly to quarterly.



High interest rates, low affordability, and lower home sales contributed to lower mortgage originations across all mortgage lenders.

Originations of residential mortgages nationwide declined 27 percent in 2023 from 2022, for mortgages originated by banks and nonbanks alike, and remained well below pre-pandemic levels. In addition, many banks tightened underwriting standards for residential mortgage loans. According to the January 2024 Federal Reserve Senior Loan Officer Opinion Survey, a growing share of bank survey respondents tightened underwriting standards on residential real estate loans in fourth quarter 2023 relative to one year earlier.32

As mortgage originations contracted overall, the share of residential mortgage lending by the banking industry declined and nonbank mortgage loan providers gained market share. See the Nonbank Lending section of this chapter for more information on exposure by banks to nonbank mortgage lenders.

The banking industry reported higher residential mortgage loan balances with community banks, continuing their role as a key lending source.³³

The banking industry reported \$2.8 trillion in residential mortgage loans in fourth quarter 2023, up 3.1 percent from one year earlier and the largest balance since 2008. Community banks continued to play an important role in residential lending; as of fourth quarter 2023, community banks accounted for 18 percent of the banking industry's total residential mortgage loans compared with 15 percent of the banking industry's total loans. Year-over-year residential mortgage loan growth among community banks was particularly strong in the West (15 percent) and South (8.4 percent).

Banks retained more residential loans on their balance sheets rather than selling in the secondary market due to rising mortgage rates and high inflation that increased the dollar amount of loans needed to finance home purchases. During 2023, the quarterly average of residential mortgage loans sold was \$94.1

³² Board of Governors of the Federal Reserve System, <u>Senior Loan Officer Opinion Survey on Bank Lending Practices</u>, January 2024.

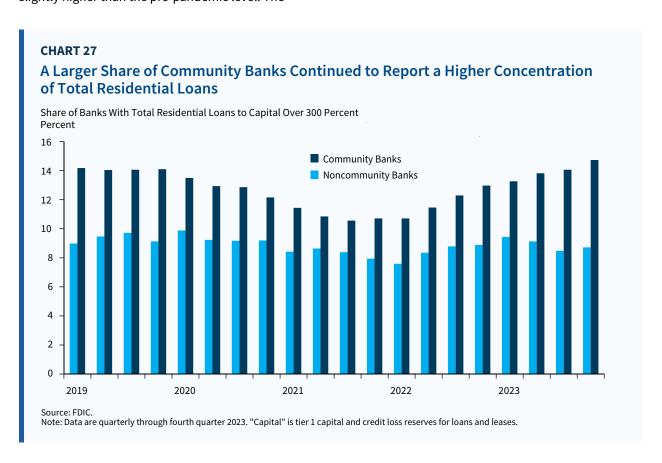
³³ Total residential mortgage loans include real estate loans secured by 1–4 family residential properties (home equity lines of credit plus all other 1–4 family residential real estate loans).

billion, representing 3.3 percent of total residential mortgage loans. By comparison, quarterly residential mortgage loans sold averaged \$208 billion, or 8.5 percent of total residential mortgage loans, before the pandemic.

Higher residential loan balances held by banks overall in 2023 contributed to increased concentrations. especially among community banks. As of fourth quarter 2023, the median ratio of residential mortgage loans to capital rose to 138 percent, up from one year earlier and near the level reported in third quarter 2019. Community banks reported a median concentration of 142 percent in the fourth quarter, slightly higher than the pre-pandemic level. The

share of community banks with a high concentration of residential mortgage loans to capital, above 300 percent, reached nearly 15 percent, a return to the prepandemic level (Chart 27). Almost two-thirds of these community banks are in the Midwest and Northeast.

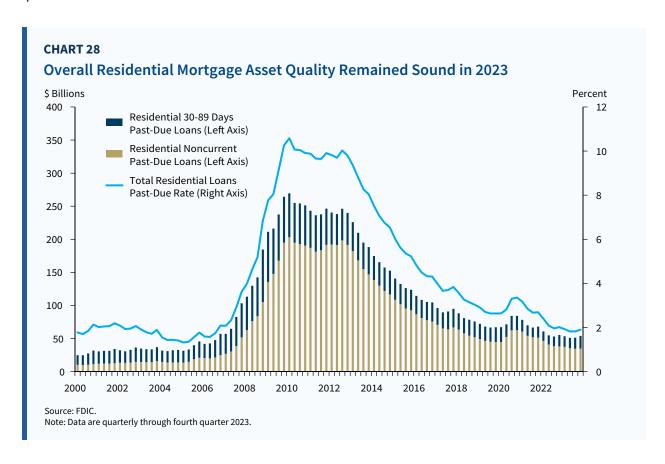
As construction of new homes slowed, the volume of 1-4 family residential C&D loans declined. Banks reported \$97 billion in 1-4 family residential C&D loans in fourth quarter 2023, down 7 percent from one year earlier and the largest annual decline since third quarter 2012. Both community banks and noncommunity banks reported a decline in 1–4 family residential C&D loan balances in 2023.



Asset quality of residential mortgage loan portfolios among banks remained sound in 2023.

The banking industry's aggregate total residential mortgage loan past-due rate declined to 1.91 percent, down from 2.02 percent a year earlier. The early-stage delinquency rate on residential mortgage loans also remained low, 0.68 percent in fourth quarter 2023, but was up slightly from one year earlier (Chart 28). Community banks reported an aggregate past-due rate to 1.07 percent, up from 1.02 percent one year earlier. Community banks in the South reported the highest residential past-due ratio at 1.3 percent in the fourth quarter.

The trend in 1-4 family residential C&D asset quality was negative in 2023, but the level of past-due loans was still moderate. The total past-due rate for all banks rose to 0.89 percent in fourth quarter 2023, up from 0.56 percent one year earlier. Among community banks, the past-due rate on 1-4 family residential C&D loans in 2023 rose to 1.04 percent from 0.56 percent in 2022. Deterioration was most pronounced among community banks in the Midwest and West. Noncommunity banks also reported a higher total past-due rate on residential C&D loans, 0.76 percent, up from 0.56 percent in 2022.

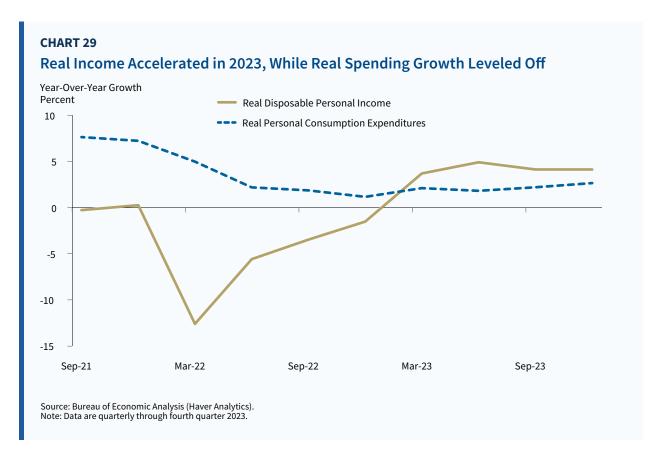


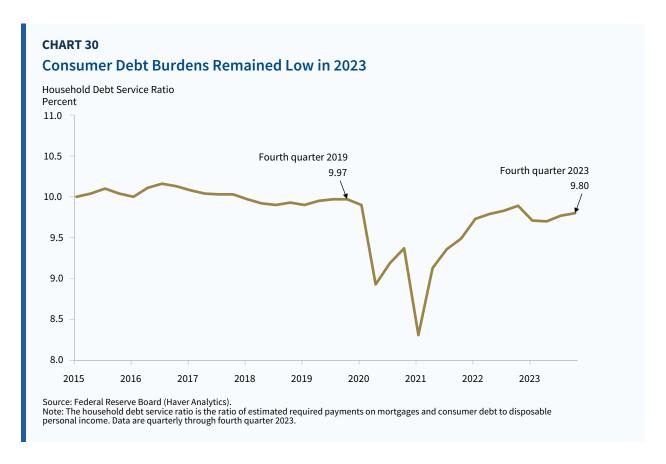
Consumer

- · Household balance sheets were solid in 2023 along with higher net worth, but household savings declined despite higher incomes.
- · Consumer loan growth at banks slowed in 2023 as banks tightened lending standards and households reduced their demand for loans.
- Consumer loan performance for the industry weakened in 2023.
- · Consumer loan performance at community banks remained better than before the pandemic.

Household balance sheets were generally solid in 2023 along with higher net worth, but household savings declined despite higher incomes. The labor market remained tight as job openings far exceeded the number of people looking for jobs, driving nominal wage growth to outpace inflation throughout the year. Real disposable personal income rose from year-earlier levels in each quarter, supporting strong consumer spending growth in 2023 (Chart 29). Even as consumer spending grew, the personal savings rate rose from a year earlier but remained below pre-pandemic (2019) levels.

Moderating inflation and an increase in household wealth helped support household spending in 2023. Household net worth rose quarter over quarter in the first half of 2023, fell in the third quarter as stock prices declined, and recovered in the fourth quarter. Household net worth was higher than a year earlier and up 34 percent from fourth quarter 2019. Debt burdens remained low, with the household debt service ratio below the year-end 2019 level throughout 2023 (Chart 30). Lower mortgage payments from households that locked in low mortgage rates in 2020 and 2021 continued to mitigate debt burdens.





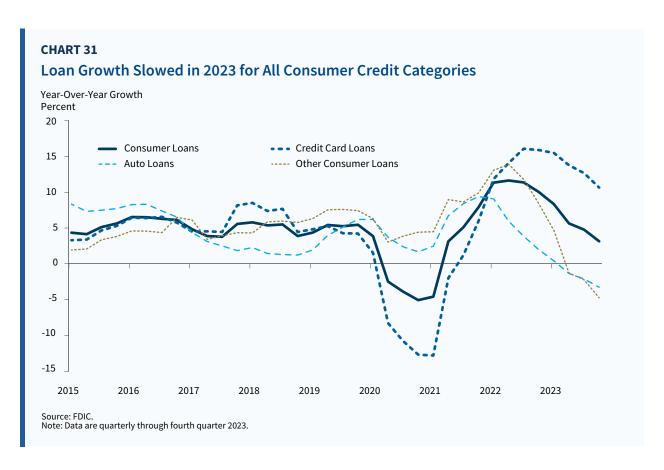
The mortgage service ratio, the ratio of estimated mortgage payments to disposable personal income, declined 13 basis points from fourth quarter 2019 through fourth quarter 2023. The consumer debt payments ratio, the ratio of estimated payments on nonmortgage consumer debt to disposable personal income, fell only 5 basis points over the same period.

Tighter underwriting standards and reduced loan demand contributed to a decline in consumer loans in 2023. According to Federal Reserve Senior Loan Officer Opinion Surveys, on net, the banking industry tightened lending standards on credit card loans, auto loans, and other consumer loans throughout 2023. Banks also reported lower demand for consumer loans. As a result, the industry's loan growth slowed for all consumer credit categories in 2023 (Chart 31). Even as quarter-over-quarter credit card loan growth slowed in 2023, year-over-year growth was positive and remained above pre-pandemic levels. In contrast, auto and other consumer loan growth declined year over year in the second through fourth quarters.

After strong growth early in the year, consumer loans at community banks contracted in 2023. "Other consumer loans," which comprise half of consumer loans at community banks, rose 35 percent from a year earlier in the first quarter, but growth slowed later in the year and turned negative in the second half of the year. Credit card loans at community banks also rose quickly in first quarter before slowing later in the year. But these loans comprise only 4 percent of consumer loans at community banks.³⁴ The banking industry's credit card lending is concentrated in a few banks; the top ten credit card lending banks held 90 percent of outstanding credit card loans at banks in fourth quarter 2023. Auto lending is also concentrated, but to a lesser extent; the top ten auto lending banks held three-quarters of outstanding auto loans at banks.

The banking industry's consumer loan quality weakened in 2023, and some measures ended the year worse than their pre-pandemic levels. Past-due and nonaccrual (PDNA) rates—the share of loans that are more than 30 days delinquent or

³⁴ Noncommunity banks hold a higher share of consumer loans than they do of industry assets. Noncommunity banks hold more than 99 percent of outstanding credit card loans, 94 percent of auto loans, and 93 percent of other consumer loans, compared with 89 percent of industry assets.

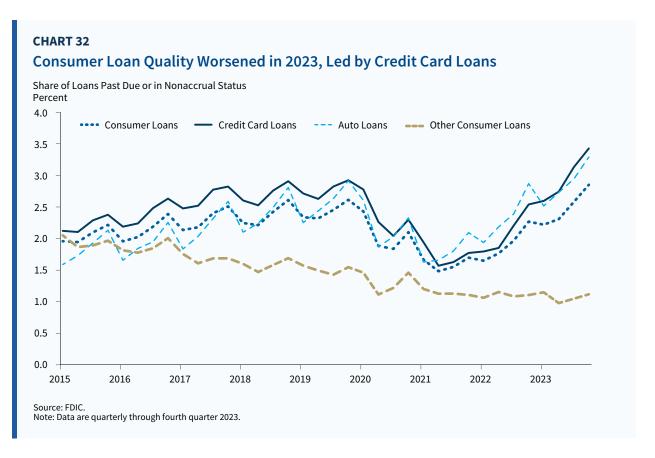


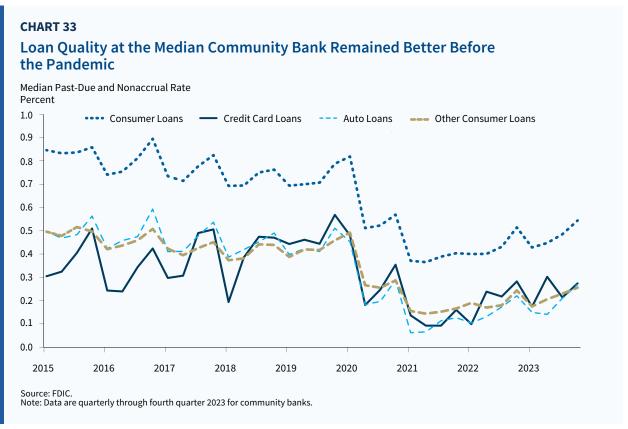
in nonaccrual status—for auto and credit card loans increased throughout the year and ended above their pre-pandemic average levels (Chart 32). The industry's credit card PDNA rate in fourth guarter 2023 was 3.4 percent, the highest rate since third quarter 2011. Similarly, the PDNA rate for auto loans in fourth quarter 2023 was 332 percent, the highest rate since auto loan data became available in Call Reports in first quarter 2011. However, delinquency measures for other consumer loans, which comprise about a quarter of all consumer loans, remained below their prepandemic levels. Net charge-off rates for consumer loan categories were higher than pre-pandemic levels at year-end.

Consumer loan quality at community banks worsened in 2023 but remained better than before the pandemic. Consumer loan quality worsened at community banks as a whole in 2023, but the changes in performance were small for the median community bank. Past-due and nonaccrual rates were higher at the median community bank at year-end 2023 than a year earlier for all loan categories except credit cards, but the rates were all still well below pre-pandemic levels (Chart 33).35

In 2024, the health of the consumer will be a key driver of U.S. economic growth. A continued strong job market would help to drive consumer spending. Consumer credit, especially within credit cards and auto loans, will warrant continued close monitoring.

³⁵ The calculations of medians exclude banks that do not make that type of loan. Only 604 community banks reported credit card loans on their balance sheets in fourth quarter 2023, while 3,697 had auto loans and 4,021 had other consumer loans.



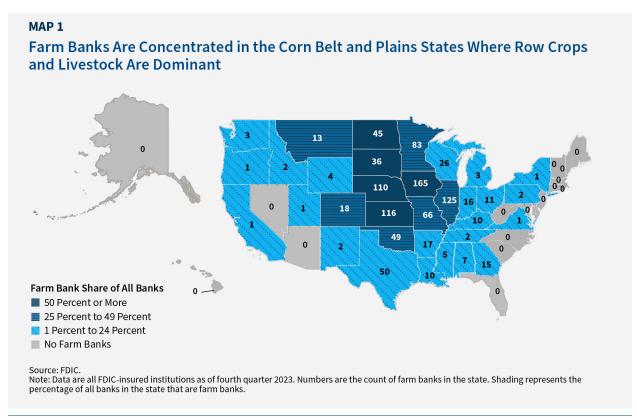


Agriculture

- · Despite some softening in 2023, conditions in the U.S. agricultural sector remained strong.
- Agricultural loan quality remained favorable in 2023 and agricultural loan growth was strong, contributing to higher loan concentrations at banks.
- Solid growth in agricultural operating loans is likely to continue in 2024.
- Farm real estate values remained strong, but appreciation may slow.

Eighty-three percent of banks held agricultural loans of some type in fourth quarter 2023, representing a total of \$199.2 billion. Farm banks held \$84.2 billion, or 42.3 percent, of total farm loans.³⁶ The nation's 1,016 farm banks make up more than one-fifth of all FDIC-insured institutions in the United States. Most farm banks are smaller community banks with limited geographic footprints; as of year-end 2023, all but 12 of the nation's farm banks were community banks, and only 151 (14.9) percent) had total assets above \$500 million.

Farm banks represent sizeable shares of banks throughout much of the Midwest. Two-thirds of states have at least one farm bank, but farm banks are highly concentrated in the middle of the country (Map 1). In five states, farm banks represent more than half of all banks in the state, and in another six states, farm banks represent more than a quarter of all banks in the state. In total, these 11 states headquarter more than 80 percent of all farm banks in the nation. Corn, soybeans, and wheat are the primary crops in these states, and cattle and hogs are the predominant livestock raised.³⁷ In aggregate, these commodities accounted for 84.4 percent of total farm cash receipts in these 11 states in 2023.



³⁶ Farm banks have agricultural production loans plus real estate loans secured by farmland equal to or exceeding 25 percent of total loans and leases.

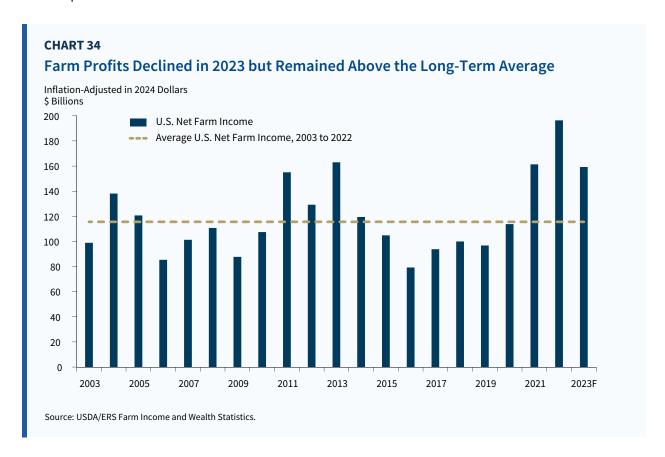
³⁷ According to U.S. Department of Agriculture (USDA) cash receipt data for 2022, corn ranked as a top-three commodity in nine of the eleven states, followed by cattle and soybeans in seven states, hogs in four states, and wheat in three states.

The U.S. agricultural sector softened in 2023 but remained strong. The U.S. Department of Agriculture (USDA) forecasts that 2023 nominal net farm income declined 16.0 percent year over year to \$155.9 billion on both higher production expenses and lower cash receipts.³⁸ This projection represents a moderation from record farm income in 2022 but is still more than 30 percent above its long-term average on an inflationadjusted basis (Chart 34). Both crop and livestock receipts are expected to have declined in 2023 on lower prices; livestock was also affected by lower sales. The USDA forecast shows that higher interest expense, property taxes, labor costs, and purchase costs for livestock and poultry drove higher production expense in the sector.

Corn, soybean, and wheat prices declined in 2023 after a strong year in 2022. Lower prices for corn and soybeans were the result of a combination of solid U.S. production, a strong U.S. dollar, record production in South America, and China's greater reliance on Brazil for its imports. These factors resulted in weaker U.S.

exports and a strong increase in U.S. corn inventory levels. Wheat prices were also lower after a good harvest year in the United States and weaker export activity that caused wheat inventories to rise.

Cattle and hog producers had markedly different years in 2023. Cattle prices remained elevated in 2023 due to drought-induced herd liquidations that caused historically low inventory levels. Cow-calf ranchers that were largely unaffected by drought and feedlot operators (finishing cattle for slaughter) were largely profitable in 2023. In contrast, hog prices declined and high input costs caused many hog producers to be unprofitable during the year. But farm bank credit exposure to hog production is most often concentrated in facilities financing loans to contract growers, so borrowers and banks are largely insulated in the short term from much of the price and cost exposure from hog markets.



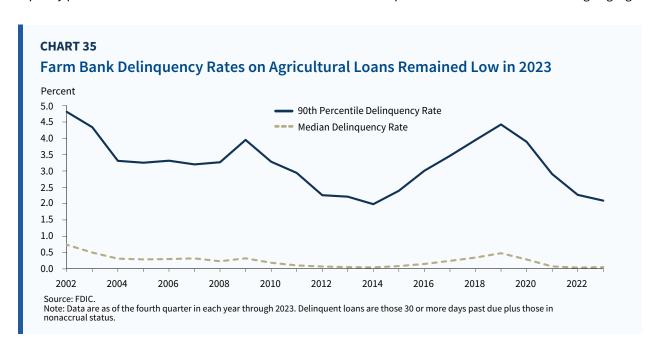
³⁸ See USDA, 2024 Farm Sector Income Forecast, February 7, 2024. The 2023 forecast will become an estimate with the USDA's next forecast release scheduled for September 2024.

Agricultural loan quality remained favorable in

2023. Reflecting the recent strength in farm income, past-due and nonaccrual agricultural loan ratios at farm banks remained near historic lows at year-end 2023. With just 56 percent of farm banks reporting any PDNA agricultural loans, the median PDNA agricultural loan ratio for all farm banks was 0.05 percent in fourth quarter 2023, up from 0.04 percent one year earlier (Chart 35). At the same time, the 90th percentile PDNA ratio for farm banks was near a 20-year low. PDNA agricultural loan ratios could rise modestly in 2024 as producers face tighter operating margins and lower liquidity positions.

Solid growth in agricultural production loans in 2023 contributed to higher agricultural loan concentrations

at banks. Strong incomes in 2021 and 2022 greatly reduced agricultural production loan demand from farmers as they self-financed greater shares of their operating expenses. However, borrowing increased in 2023 as expenses remained high and operating margins narrowed. In fourth quarter 2023, total agricultural loans held by all banks were 4.6 percent higher than prioryear levels. Agricultural production loans accounted for approximately 67 percent of this growth and increased 7.5 percent year over year—the fastest pace of growth since first quarter 2016. The combination of ongoing high

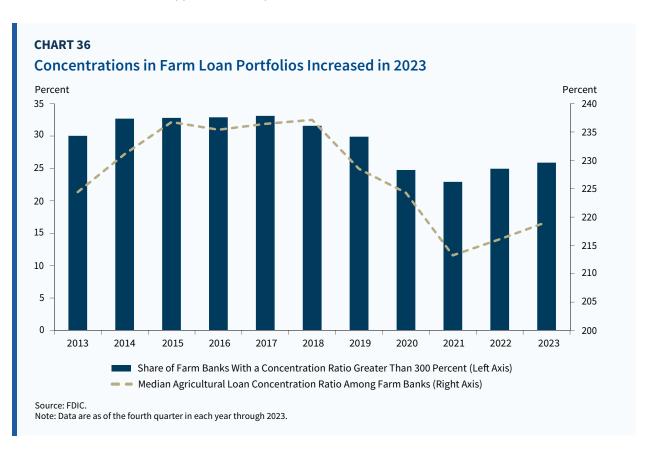


expenses, weaker operating returns in 2023, and lower cash balances is likely to drive continued demand for agricultural loans in 2024.

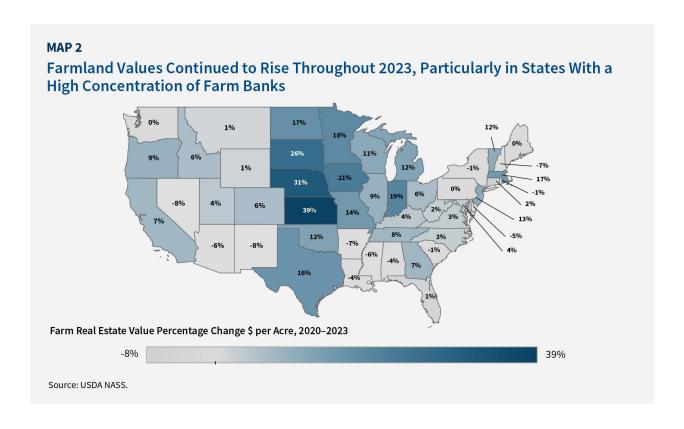
Because of strong loan growth, concentrations in agricultural loans increased slightly in 2023. The median ratio of agricultural loans to capital at farm banks increased to 219.1 percent from 216.1 percent in 2022, though it remained well below pre-pandemic levels (Chart 36). Just over one-quarter of farm banks (263 banks, or 5.7 percent of all banks in the nation) held a concentration of agricultural loans above 300 percent of capital.

Farm real estate values remained strong, but appreciation may slow. Despite much higher interest rates, demand for farmland remained strong in 2023 and farm real estate values rose 7.4 percent on average according to the USDA. On an inflation-adjusted basis, farm real estate values have appreciated 11.6 percent

since 2020 and are at an all-time high. The five states in which agricultural banks make up the majority of commercial banks reported much higher inflationadjusted farm real estate appreciation than the national average, ranging between 16.6 percent (North Dakota) and 39.2 percent (Kansas) (Map 2). Bankers remain cautious about farmland loan-to-value ratios, mitigating supervisory concerns about excessive lending against inflated land values that was one of the key causes of the agricultural crisis in the 1980s. However, valuation-to-rent ratios are high, and the combination of higher borrowing costs and prospects of lower incomes will likely dampen demand for farmland in 2024.39



³⁹ The strong appreciation in farmland values since 2020 has outpaced growth in cash rental rates, causing farmland price to cash rent multiples to increase. Using USDA average cropland value and average cash rent data, the national cropland price to cash rent multiple increased from 29.5 in 2020 to 35.2 percent in 2023, which exceeds the most recent peak of 32.6 set in 2007. The rent multiple had been fairly flat from 2013 through 2020.



Small Business

- Steady consumer spending helped support business conditions in 2023.
- · Community banks remained an important source of small business lending.
- · Commercial and industrial (C&I) loan asset quality, a proxy for small business loan performance, remained relatively sound in 2023, but uncertain small business conditions may be a source of credit risk.

Steady consumer spending helped support business conditions in 2023. In January 2024, the National Federation of Independent Business (NFIB) reported that 20 percent of small business owners said inflation was the single-most important problem in operating their business. This share is down from July 2022 when 37 percent of businesses reported this concern, but it is still well above normal levels. Respondents similarly reported that the quality of available labor was concerning; 21 percent of small business owners reported they had job openings that were hard to fill. To address the labor shortage, a net 39 percent of respondents reported raising worker compensation in fourth quarter 2023.

Despite these adverse business conditions, consumer spending helped to buoy small business in 2023. Consumer spending grew throughout most of the year, though at a pace closer to pre-pandemic levels than to the strong pace in 2021. Surveys suggest that consumers have increased their share of purchases from small businesses. In the first half of 2023, consumer credit card spending at small and medium-sized retailers was up 63 percent from the first half of 2019, higher than the 44 percent gain for large retailers. 40 A 2023 survey from BankRate found that 72 percent of shoppers planned to shop at small businesses over the holiday season, up from 65 percent in 2022.41

Business applications for service industries increased from 2022, led by retail trade. Business applications for service-based industries, which include 86 percent of small businesses, increased throughout 2023.42 This is consistent with the

continued recovery of the services sector that reached low points during the pandemic. Retail trade and accommodation and food services business applications outpaced other sectors, as consumers continued to purchase items and to travel.

Small business financing became more costly throughout 2023 as lending standards tightened.

Median interest rates on small business loans increased more than 300 basis points from 2022, making it more costly to maintain a small business and reducing small business loan demand. As banks tightened lending standards, small businesses faced credit constraints that resulted in an 18.1 percent year-over-year decline in lending to those businesses in third quarter 2023 and a 16.4 percent decline from second guarter 2023.43 An NFIB survey completed in December 2023 that focused on financing concerns reflected the continued tightening and showed that 80 percent of small business owners who accessed credit in the past three months reported high interest rates as their largest financing complaint, up from 58 percent in July 2023.44 The Federal Reserve Senior Loan Officer Opinion Survey released in January 2024 showed that the net share of banks that reported tightening lending standards on C&I loans to firms of all sizes cited a less favorable or a more uncertain economic outlook, reduced tolerance for risk, and less aggressive competition from banks as important reasons for doing so (Chart 37).

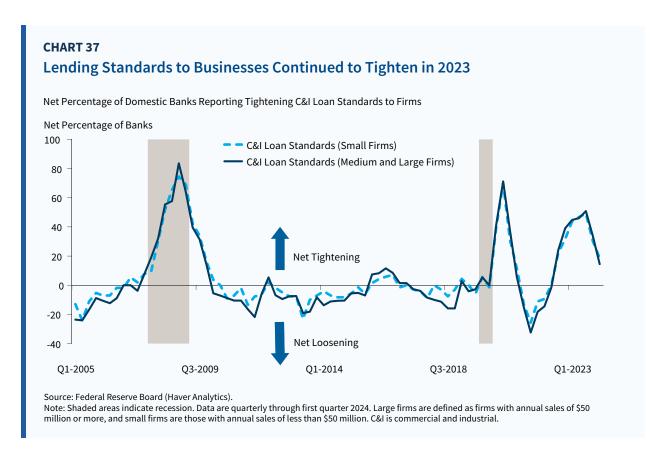
⁴⁰ Mastercard, "<u>U.S. Small Business Growth in a Shifting Economy</u>," October 10, 2023.

⁴¹ Sarah George, "Survey: More Holiday Shoppers Will Likely Shop on Small Business Saturday Than Black Friday This Year," Bankrate, November 13, 2023.

⁴² U.S. Census Bureau, Annual Business Survey, Nonemployer Statistics, 2019. For information on business formation, see Census Bureau Business Formation

⁴³ Dustyn DeSpain and Lauren Bennett, "Small Business Lending Demand Continues to Decline," Federal Reserve Bank of Kansas City, Small Business Lending Survey, December 20, 2023.

⁴⁴ National Federation of Independent Business, "New NFIB Survey: Small Business Owners Concerned With High Interest Rates," December 27, 2023.



Despite tighter underwriting, community banks remained an important source of small business lending in 2023. At year-end 2023, the banking industry held \$404 million in small business loans. 45 Community banks are an important source of funds for small businesses; as of year-end, these banks maintained an outsize share of the industry's total small-business loans at 22.2 percent, despite holding only 14.9 percent of total industry loans. This share is significantly higher than the community bank share of total C&I loans, which was 9.6 percent at year-end 2023. Annual small business loan growth reported by community banks was 4.1 percent in fourth quarter 2023. 46

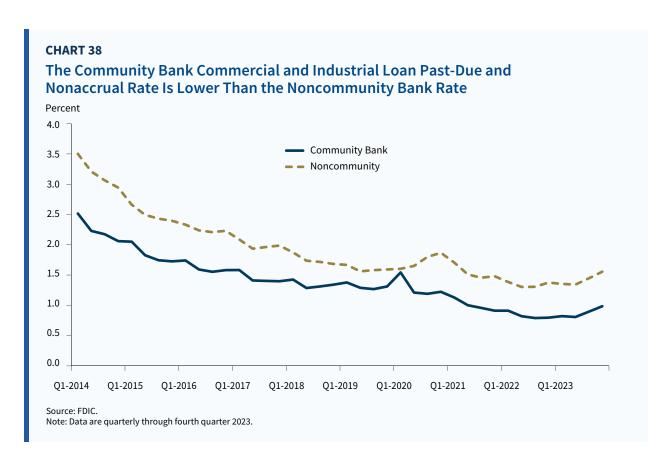
Commercial and industrial loan quality remained sound in 2023, especially for community banks.

In the absence of asset quality data reported by banks for small business loans, loan performance measures for banking industry C&I loans have historically been a good proxy for small business loan performance. The C&I past-due and nonaccrual rate reported by community banks declined at the onset of the pandemic and remained favorable through first quarter 2023, but the rate slowly increased throughout the rest of the year. Still, the past-due and nonaccrual rate for community banks remained below its pre-pandemic average and below the rate for noncommunity banks (Chart 38).

Small businesses reported weaker conditions in 2023, which may be a source of credit risk for banks. Small business owners reported concerns about operating conditions in the near term. The January 2024 NFIB survey reported that the seasonally adjusted Optimism Index remained low at 89.9, down from 2022 levels. Further, a net negative 38 percent of survey respondents said they believed that business conditions will improve over the next six months. Uncertainty about business conditions is an ongoing concern for small businesses, as the last net positive survey response for this measure was in November

⁴⁵ Small business loans are defined as commercial and industrial loans less than \$1 million, regardless of the size of the business, and are reported in Call Reports semiannually on June 30 and December 31.

⁴⁶ This calculation is net of Paycheck Protection Program loans.



2020. Amid these challenges, business demand for loans weakened in 2023, according to the January 2024 Federal Reserve Senior Loan Officer Opinion Survey. Moreover, business bankruptcies increased in 2023 and approached pre-pandemic levels. While

levels of business bankruptcies remain moderate, higher interest rates combined with weaker business conditions going into 2024 suggest a potentially challenging year for small businesses and their lenders.

Corporate Debt and Leveraged Lending

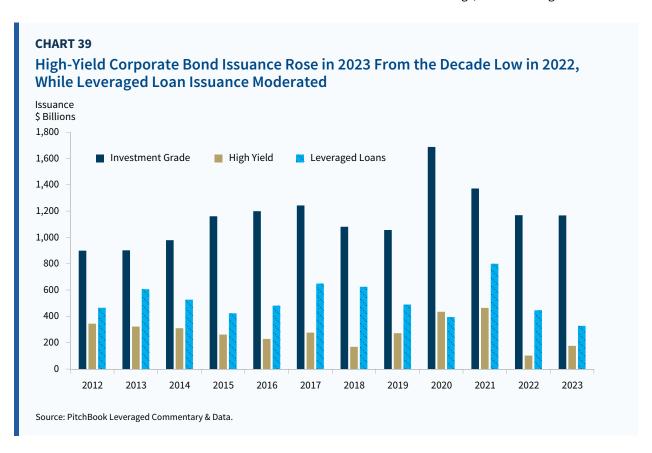
- Corporate debt increased in 2023 as market conditions improved, while bank lending to businesses continued to tighten.
- · Banks remained exposed to corporate debt through both direct credit risk exposure and investment banking activities and indirectly through its potential to affect macroeconomic conditions.
- · Limited near-term corporate debt maturities should mitigate some risks in the short term.

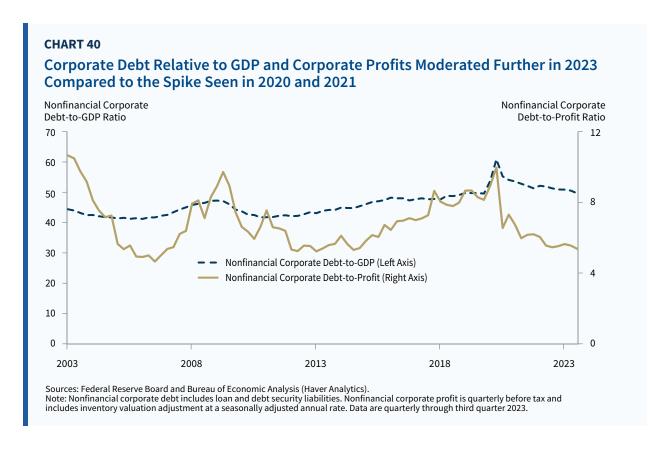
Corporate debt increased as borrowing improved through year-end, while bank lending to businesses tightened. Corporate bond and leveraged loan markets mostly rebounded from a low base in 2023; prices increased and spreads tightened. Corporate debt issuance across types was mixed amid relatively high interest rates, which rose among lower-rated bond issuers and moderated for higher-rated bonds and leveraged loan borrowers (Chart 39). Overall, nonfinancial corporate debt increased in 2023, but debt relative to corporate profits and to GDP declined (Chart 40).

While market conditions improved, bank lending to businesses in general tightened. According to the Federal Reserve Senior Loan Officer Opinion Survey results from January 2024, bank business lending conditions tightened overall in 2023. Bank net lending standards tightened for C&I loans, and demand for C&I loans weakened throughout the year.

Banks face direct and indirect exposure to corporate debt and leveraged lending markets.

Leveraged loans are typically floating-rate instruments, so credit risk is the primary risk to banks from direct loan holdings, while holdings of fixed-rate





corporate bonds expose banks to interest rate risk and credit risk.⁴⁷ Bank holdings of syndicated loans, which include leveraged loans, increased to more than \$1.38 trillion in fourth quarter 2023, up a modest 2 percent year over year after rising more than 20 percent in 2022.48 The slower growth in 2023 can be partly attributed to the lower overall supply of leveraged loans during the first half of the year.

In addition, bank holdings of collateralized loan obligations (CLOs), which contain leveraged loans, decreased to \$164 billion in fourth quarter 2023.49 Bank holdings of CLOs decreased 1.8 percent in 2023, compared to an increase of 9.4 percent in 2022. While banks typically hold the higher-rated parts of CLOs, they may also have a variety of exposures to nonbank financial institutions that hold or arrange CLO securities. These interconnected risks may expose banks to stress in the underlying leveraged loan market in ways that are difficult to measure.

Banks also earn noninterest income from underwriting and arranging corporate bond and leveraged loan issuances, making them susceptible to reduced revenue from these activities when issuance volumes fall. Reduced corporate debt and leverage lending activity would reduce fee income for banks that gain revenue from these activities. These types of underwriting activities are primarily confined to the largest banks.

While direct exposures to corporate debt markets through lending activities and securities holdings are concentrated in larger banks, other banks may face indirect exposures through the effects of corporate debt distress on macroeconomic conditions. For example, significant corporate debt distress could magnify an economic downturn by forcing firms to pull back on investment and lay off employees.

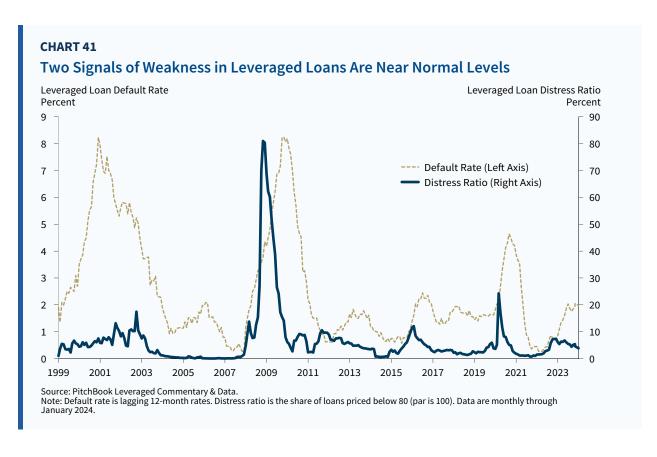
⁴⁷ Banks may hedge a portion of this credit risk through use of credit derivatives such as credit default swaps. For more information on the amount of credit derivatives held by FDIC-insured banks, see FDIC Quarterly Banking Profile Table VI-A.

⁴⁸ Federal Reserve Board of Governors, Financial Accounts of the United States—Enhanced Financial Accounts.

⁴⁹ FDIC, Call Reports.

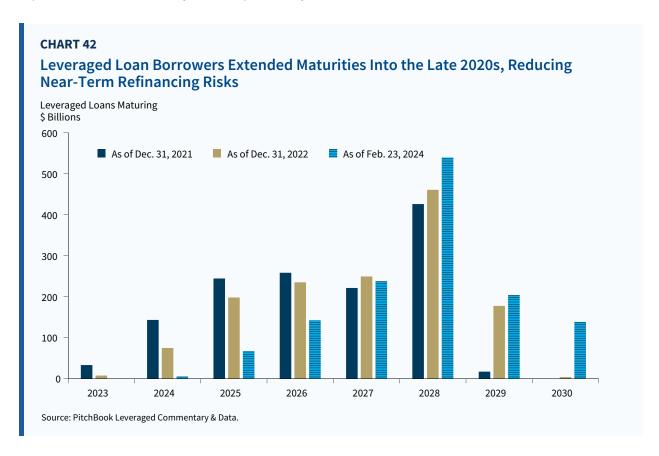
Limited near-term corporate debt maturities should mitigate some risks in the short term. In 2023, leveraged loan default rates increased, while corporate-debt distress rates declined modestly. Default rates for corporate bonds ended 2023 at 3.0 percent, up from 1.4 percent at the end of 2022 but below pre-pandemic levels. Leveraged loan default

rates increased to 2.0 percent in January 2024 from 0.85 percent a year earlier, while leveraged loan distress ratios decreased from 6.1 percent to 3.8 percent. Both signals of weakness in the leveraged loan market are near normal levels and well below prior stress periods (Chart 41).



A slowing economy in 2024 could cause some companies to face more challenging economic conditions. In addition, should interest rates remain higher for longer than market participants expect, corporate profitability and repayment or refinancing capabilities could be adversely affected, particularly

among lower-rated companies.⁵⁰ Fortunately, many corporations extended their debt maturities during the early years of the pandemic, taking advantage of lower interest rates that will thereby limit their refinancing needs in the near term (Chart 42).51



⁵⁰ Continuum Economics, "U.S. Outlook: Slower Growth to Sustain Improved Inflation Picture," December 15, 2023; Moody's Analytics, "U.S. Outlook: Sizing Up the Surprises," December 18, 2023; and Continuum Economics, "2024 and 2025 DM Rate Cuts," January 2, 2024.

⁵¹ S&P Global, "Credit Conditions North America Q1 2024," November 28, 2023.

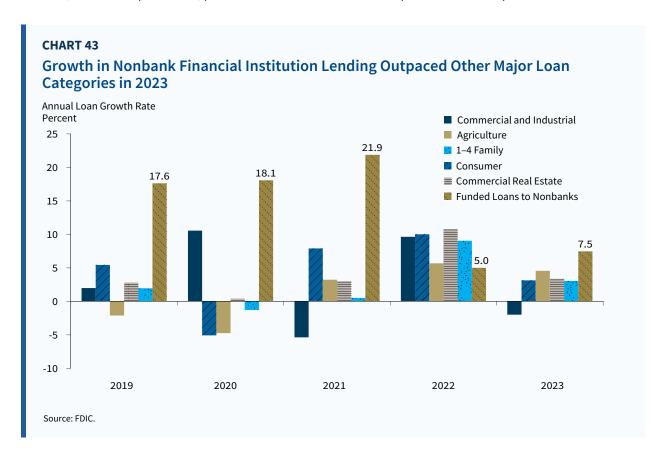
Nonbanks

- · As the nonbank financial sector has continued to expand, so has lending by banks to nondepository financial institutions (NDFIs).
- · Global systemically important banks continued to have the highest concentration of loans to NDFIs. Community bank exposure to nonbank entities is limited to a small group of banks and continued to decline in 2023.
- Despite current favorable asset quality measures, sudden changes in market conditions may pose potential indirect and direct risks to nonbanks and their lenders.

The banking industry continued to lend to nonbanks in 2023, and the rate of NDFI loan growth **increased.** In 2023 the nonbank financial sector continued to expand, and direct bank lending to NDFIs remained robust. While overall loan growth in the banking industry moderated in fourth quarter 2023, the year-over-year growth rate in NDFI lending continued to outpace growth rates in all other major loan portfolios (Chart 43). Banks lend to many different types of NDFIs, including investment firms, nonbank mortgage companies, insurers, financial vehicles, transaction processors, private credit

funds, and other entities. Banks provide credit-line commitments to these firms, and NDFIs rely on these lines as a key source of liquidity for day-to-day operations and for funds to lend or to invest.

Global systemically important banks (GSIBs) continued to have the highest concentration of loans to NDFIs. GSIBs hold more than 60 percent of all bank loans to NDFIs, and in fourth quarter 2023 GSIBs reported 10.9 percent year-over-year growth in funded NDFI balances.⁵² Funded NDFI loan commitments as a share of capital reached 54.8 percent at GSIBs in fourth



⁵² The eight U.S. GSIBs are Bank of America, Bank of New York Mellon, Citigroup, Goldman Sachs, JPMorgan Chase, Morgan Stanley, State Street Corporation, and Wells Fargo.

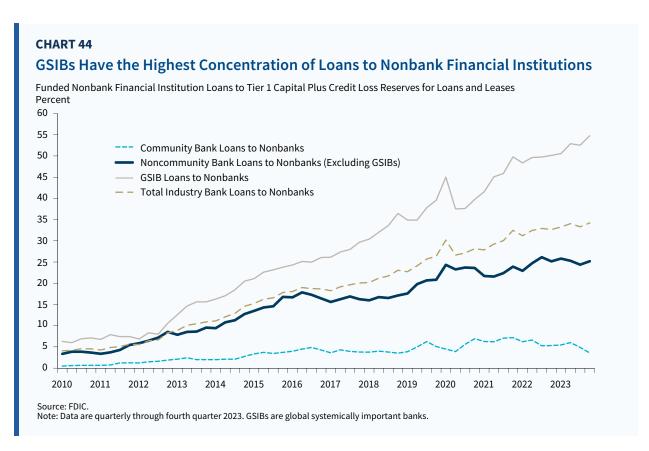
quarter 2023, up from 39.6 percent at year-end 2019 (Chart 44). In addition to credit-line commitments, GSIBs issue term loans, asset-based loans, and other facilities to nonbanks. While GSIBs lend to a wide variety of nonbank entities, their largest commitments tend to be to investment firms and financial vehicles.

Community bank exposure to nonbank entities, which is limited to a small group of community banks, continued to decline in 2023, largely because of challenges in the nonbank mortgage industry. Only 9.2 percent of community banks held loans to NDFIs, and these loans accounted for only 0.60 percent of total community bank lending. Community bank loan commitments decreased 48.0 percent from the peak level at year-end 2021 and have declined year over year in each quarter since third quarter 2022. Supervisory observations suggest that most lending to NDFIs by community banks is through warehouse lines of credit to nonbank mortgage companies. As

mortgage originations declined amid rising interest rates in 2022 and 2023, many nonbank mortgage companies reduced their credit-line usage at banks.

A decline in home sales has challenged the nonbank mortgage industry. Should households become strained from the impact of inflation or a slowing economy, the industry may face an increase in borrower delinquencies. Widespread delinquencies might strain nonbank mortgage servicers' liquidity, as some servicers have to repurchase distressed mortgages while maintaining investor payments. Stress for these nonbanks could lead to larger systemic issues given nonbanks' large and increasing share of the mortgage market.53

Despite current favorable asset quality measures, sudden changes in market conditions may pose potential indirect and direct risks to nonbanks and **their lenders.** The past-due and nonaccrual rate for



⁵³ Financial Stability Oversight Council, 2023 Annual Report.

"all other loans," the Call Report category that includes loans to NDFIs, was 0.45 percent in fourth quarter 2023, 51 basis points below the average rate from 2010 through 2019.54 Yet vulnerabilities exist within the NDFI ecosystem because of rising interest rates and inflationary pressures.

Structurally, nonbanks are typically highly leveraged and prone to liquidity mismatches more so than banks. These structural differences may lead to indirect and direct risks to the banking industry. For example, nonbanks typically obtain funding through more volatile sources than do banks. Some NDFIs allow investors to recall their capital regularly

even though they may hold relatively illiquid assets. Forced or sudden deleveraging by NDFIs for liquidity purposes may contribute to changes in asset prices and, if sizable, may amplify price declines marketwide.55 Research suggests that some NDFIs extend credit to riskier borrowers than banks lend to and reduce lending considerably more so than the banking industry during financial shocks.⁵⁶ Ultimately, some NDFIs' illiquid structure and exposure to riskier borrowers could result in direct risk to their bank lenders should they fail.

^{54 &}quot;All other loans" (as defined in Schedule RC-N) comprises loans to nondepository financial institutions, loans for purchasing or carrying securities, obligations of states and political subdivisions in the United States, and on the FFIEC 041 only, all loans to finance agricultural production. Loans to NDFIs comprised approximately half of "all other loans" (as defined in Schedule RC-C) in third quarter 2023.

⁵⁵ International Monetary Fund, "Global Financial Stability Report: Safeguarding Financial Stability Amid High Inflation and Geopolitical Risks," April 2023.

⁵⁶ Iñaki Aldasoro, Sebastian Doerr, and Haonan Zhou, "Nonbank Lending During Crises," Bank for International Settlements and Princeton University, June 27, 2023.

Energy

- Economic conditions in energy-producing states were generally favorable and relatively stronger than in other states.
- U.S. oil production increased, while oil prices declined during the latter half of 2023.
- · Bank loan exposure to oil and gas firms continued to decline in 2023. Higher prices that prevailed in the first three quarters of the year enabled oil and gas firms to reduce their borrowing needs.
- · Community bank asset quality in energy-concentrated states deteriorated slightly in 2023. Loan delinguency rates rose somewhat but remained low by historical standards.

U.S. oil production increased in 2023, and economic conditions were generally favorable in energy**producing states.** U.S. oil production rose sharply in 2023, aided by the post-pandemic easing in supply constraints (rigs, parts, and workers) and efficiency gains that boosted production growth. The Energy Information Administration estimates that U.S. crude oil production reached an all-time high of 13.3 million barrels per day in December 2023.⁵⁷ Eight states collectively referred to as "energy-producing states" in this chapter accounted for 79 percent of the nation's crude oil production in December 2023, a gain of almost 11 percent from the same month a year earlier.58

Economic conditions among energy-producing states were favorable in 2023. Total employment in energy-producing states increased 3.0 percent in 2023 compared to 2.2 percent for the rest of the nation.⁵⁹ Real GDP in energy-producing states grew 4.5 percent in 2023 compared to 2.1 percent in non-energyproducing states.60

Geopolitical events and economic conditions pushed oil prices higher through most of 2023, but increased non-OPEC production kept oil prices from surging. Oil prices began to rise in mid-2023 after a series of production cuts undertaken by OPEC+ in an effort to stabilize global oil markets (Chart 45). These cuts cumulatively reduced oil output from the market

by about 5 million barrels per day, roughly equal to 5 percent of global demand. The production cuts initially boosted West Texas Intermediate oil prices, but prices declined later in the year due to expectations of lower demand from softening global economic conditions, stronger-than-expected supply from non-OPEC producers, and new reserve discoveries. Recordhigh U.S. crude oil production has been spurred by productivity increases at new wells brought about by advances in horizontal drilling and hydraulic fracturing technologies. Employment growth in many energyproducing states consequently benefited as a result of the jobs, labor income, and household spending by workers and owners.

Bank lending to the oil and gas industry continued to decline in 2023, while credit quality strengthened further, reflecting sound oil and gas industry fundamentals during the year.

Results of the 2023 Shared National Credit review showed a slight decline in the volume of oil and gas commitments and continued asset quality improvement. Total oil and gas commitments declined 8 percent between 2020 (the height of credit stress during the pandemic) and 2023. The "Special Mention + Classified" rate also declined from 20 percent to 5 percent during this time, in part reflecting improved industry fundamentals.61

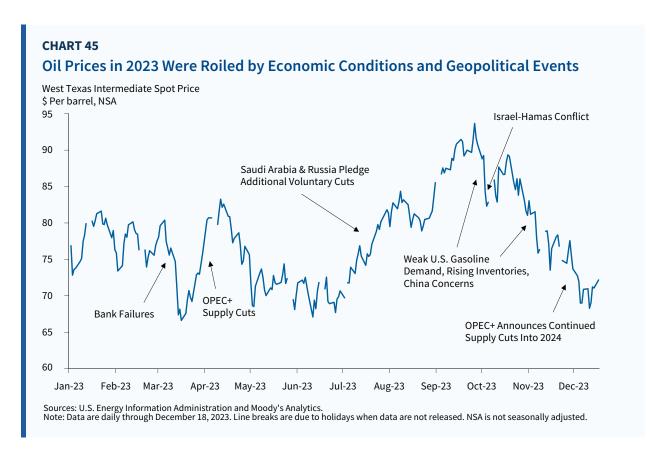
⁵⁷ U.S. Energy Information Administration, "Short-Term Energy Outlook," February 2024, p. 3.

⁵⁸ The eight energy-producing states are Alaska, Colorado, Louisiana, New Mexico, North Dakota, Oklahoma, Texas, and Wyoming. Data are from the U.S. Energy Information Administration.

⁵⁹ Employment data estimates are from the Oxford Economics Databank based on U.S. Bureau of Labor Statistics data.

 $^{^{60}}$ GDP estimates are from Oxford Economics based on Bureau of Economic Analysis data.

⁶¹ Oil and gas sector lending is not available at the bank level in Call Report data. However, the Shared National Credit (SNC) Program, which reviews large, syndicated loans by industry sectors that are held by banks, may serve as a proxy for bank loan exposure to the oil and gas industry. The SNC Program assesses risk in complex credit loan commitments to borrowers in excess of \$100 million that are shared by multiple regulated financial institutions. SNC reports can be

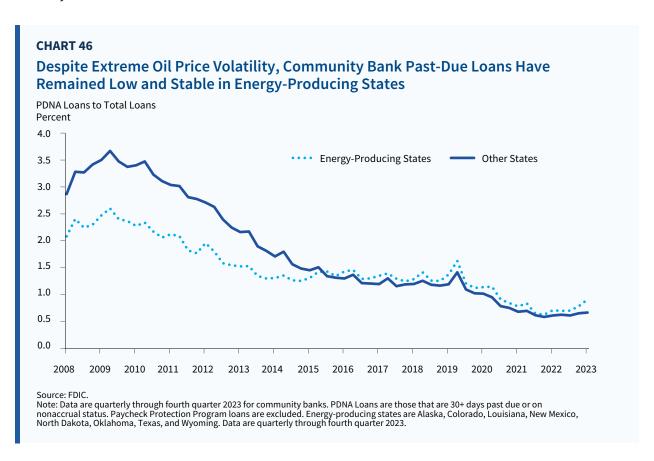


In addition to reduced direct loan obligations from large banks, oil and gas firms also issued relatively low amounts of public debt and equity in 2023. Although new issuance volumes by these firms recovered from a trough reached in 2022, combined debt and equity issuance volumes for 2023 were still the second lowest over the past ten years and just over half the amount issued in 2020.

Asset quality of community banks headquartered in energy-producing states deteriorated slightly in

2023. Although community banks generally do not lend directly to the energy sector, these banks are often active lenders and providers of banking services in energy-producing areas. In 2023, loan quality deterioration was somewhat more pronounced in energy-producing states than in other states despite relatively favorable economic conditions. The

median total past-due loan rate for community banks headquartered in energy-producing states was 0.91 percent in fourth quarter 2023, up 20 basis points from one year earlier but still below the pre-pandemic fiveyear average of 1.34 percent. Still, the group's past-due loan rate remained noticeably higher than the 0.67 percent for community banks not headquartered in energy-producing states (Chart 46).



SECTION 5

Operational and Cyber Risks

- · Operational risks remain critical to banks as malicious cybercrime activities evolve and become more sophisticated.
- · Ransomware and supply chain attacks continue to threaten banks and their third parties and remain an important source of risk to the financial industry.
- Geopolitical events continued to increase the likelihood of cyber-attacks on banks in 2023.
- While the use of checks has declined, check fraud continued to rise.
- Adoption of quantum computing and generative artificial intelligence can pose new risks to critical infrastructure systems.

Operational risks remain critical to banks as malicious cybercrime activities evolve and become more sophisticated, and as banks adopt new technologies. According to the 2023 Annual Survey of Community Banks conducted by the Conference of State Bank Supervisors and state financial regulators, cybersecurity continues to be a top internal risk priority for community banks. Nearly 92 percent of respondents cited cybersecurity as an either "extremely important" or "very important" risk priority.⁶² Technology advances require bank managers to continuously improve cybersecurity and other internal controls to create operational resilience and mitigate the risk that their bank will suffer a significant service disruption.

Ransomware actors continue to target banks and their third parties. The term "ransomware" initially was used to describe malicious software designed to encrypt files on a device until a ransom was paid for the decryption method. However, in 2023 ransomware actors shifted from data encryption to data exfiltration techniques, demanding that victims pay a ransom to keep them from exposing stolen data. In either scenario, ransomware can disrupt core business activities, result in operational outages, threaten the confidentiality of customer data, and lead to a loss of confidence. Banks reduce the risk of a ransomware attack's success and minimize its negative impacts by applying effective cybersecurity risk management and mitigation principles, including the use of multifactor

authentication, hardening of systems configurations, and timely patch management.

Ransomware threat actors continue to leverage known software vulnerabilities, phishing emails, texts targeting employees, and compromised credentials to gain access to networks through remote access. The 2023 Verizon Data Breach Investigation Report stated that 74 percent of breaches involved the human element, which includes social engineering attacks, errors, or misuse. 63 According to the IBM Cyber Security Intelligence Index for 2023, phishing was the preferred method (identified in 41 percent of incidents) that malicious cyber actors used to gain access to victimized networks and devices.⁶⁴ To heighten the likelihood of a compromise, phishing attacks used spear phishing tactics to deceive victims into clicking on unsafe links or opening infected attachments.

The Ransomware-as-a-Service (RaaS) model remains a key driver for the ongoing frequency of ransomware attacks. In this model, expert cyber actors assist less-experienced actors to become proficient at ransomware attacks. With plentiful access to RaaS kits and related support, criminals lacking the skill to develop their own malware can launch ransomware attacks quickly and affordably. In 2023, the average amount of "breakout time" for cybercriminals—or how long it took to go from initial access of a victimized network to accessing other previously untouched segments of that network (and possibly another

⁶² Conference of State Bank Supervisors, "2023 CSBS Annual Survey of Community Banks," October 4, 2023.

⁶³ Verizon, "2023 Data Breach Investigation Report," June 6, 2023.

⁶⁴ IBM, "Cyber Security Intelligence Index for 2023," February 22, 2023.

partner-enterprise's connected network)—was 79 minutes, a five-minute drop from 2022. Breakout time for cybercriminals has been as fast as seven minutes. 65

Supply chain attacks on third-party providers of software, hardware, and computing services remain an important source of risk to the financial industry. Compromised third-party software can result in disclosure of credentials or confidential data, corruption of data, installation of malware, and application outages. For example, in May 2023, the ransomware group Cl0p began exploiting a sincepatched vulnerability in a widely used file transfer software called MOVEIt. The MOVEIt campaign targeted the U.S. financial sector and other enterprises globally. By July 2023, Cl0p was responsible for more than 170 attacks.

Geopolitical events continued to increase the likelihood of cyber-attacks on banks in 2023. Events like the Israel-Hamas conflict and the war in Ukraine have led to increased cyber-attacks targeting critical infrastructure around the world. In 2023, there was an observed increase in politically motivated, distributed denial of service (DDoS) attacks against financial sector participants and others. The Microsoft Digital Defense Report, published in October 2023, stated that while U.S. entities continued to be primary targets for DDoS attacks (54 percent of all attacks), Europe climbed to the second highest with 14 percent of attacks, overtaking East Asia. The change is tied to geopolitical conflicts, with pro-Russian "hacktivist" (cyber hackers with activist sensibilities) groups intensifying their attacks against Europe and the United States. 66 Hacktivist cyber-attacks observed related to the Israel-Hamas conflict include targeting of Israeli-manufactured information technology components and software, regardless of where they are deployed.

While the use of checks has declined, check fraud continued to rise. Fraudsters are stealing mail from U.S. Postal Service boxes and sorting through envelopes to look for checks being used to pay bills. Once obtained, bad actors are using chemical and electronic means to alter the amounts and payees on the checks and then depositing them using mules.

Fraudulently altered checks can cause significant losses to financial institutions and disrupt bank operations.

Because of a nationwide surge in check fraud schemes targeting the U.S. mail, the Financial Crimes Enforcement Network (FinCEN) issued an alert to financial institutions to be vigilant in identifying and reporting such activity.67

Quantum computing will pose new risks to critical infrastructure systems. Quantum computing promises greater computing speed and power; however, it also has the potential to weaken or incapacitate current encryption methods. Traditional encryption generally relies on complex mathematical problems (encryption algorithms) that take an immense amount of time for classic computers to solve without knowing the encryption key. However, quantum computers use a different computing architecture that can solve certain types of problems much faster, including some encryption algorithms. Quantum computing is expected to eventually render public, current encryption methods useless. The Cybersecurity and Infrastructure Security Agency, the National Security Agency, and the National Institute of Standards and Technology issued a joint factsheet to encourage the early planning for migration to postquantum cryptographic standards by developing a Quantum-Readiness Roadmap.68

Generative Artificial intelligence (AI) technologies are being leveraged to circumvent identity- and authentication-based financial institution network defenses and perpetrate other frauds. Financial crime perpetrators are increasingly using AI to create fake or altered documentation, audio files, and video recordings, leading to increasing fraud cases.⁶⁹ The pervasiveness of generative AI tools allow malicious actors to easily leverage the technology to create more convincing or realistic content or materials to further fraud schemes. 70 Generative AI, including large language models, can augment live videos via "deepfakes" or voice cloning tools, making it more difficult for financial institutions to discern real versus fake identities during verification processes.

⁶⁵ CrowdStrike, "2023 Threat Hunting Report," August 8, 2023.

⁶⁶ Microsoft, "Microsoft Digital Defense Report 2023," October 2023.

⁶⁷ FinCEN, "FinCEN Alert on Nationwide Surge in Mail Theft-Related Check Fraud Schemes Targeting the U.S. Mail," FIN-2023-Alert003, February 27, 2023.

⁶⁸ Cybersecurity and Infrastructure Security Agency, "Quantum-Readiness: Migration to Post-Quantum Cryptography," August 21, 2023.

⁶⁹ Sift, "Q2 2023 Digital Trust & Safety Index - Fighting Fraud in the Age of Al and Automation," June 22, 2023.

⁷⁰ Precedence Research, "Generative Al Market Growth Is Booming With 27.02%," July 11, 2023.

SECTION 6

Climate-Related Financial Risks

- · Changing climate conditions present challenges to individual financial institutions and the broader financial system.
- In 2023, the number of billion-dollar climate events was the highest on record for a single year since 1980.
- · While insurance policies may cover some or all of the loss associated with many severe climate and weather events, policies are becoming more expensive or unavailable.

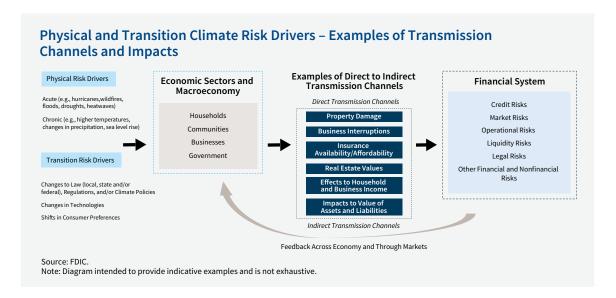
Changing climate conditions present challenges to individual banks and the financial system as a whole. Changes in climate conditions, including the increasing frequency and intensity of severe climate and weather events and other natural disasters, will likely result in growing economic and financial losses to many businesses, households, and governments.71 Moreover, uncertainty about the severity and timing

of these losses is a source of risk to the stability of the financial system. Climate-related financial risks, including both transition and physical risks, can spread to the banking system through many channels including through credit, market, and liquidity risks (see Box B for more information). This report focuses on physical risks to banks.

⁷¹ Glenn D. Rudebusch, "Climate Change Is a Source of Financial Risk," Federal Reserve Bank of San Francisco, Economic Letter, February 8, 2021.

Box B: Transition and Physical Climate-Related Financial Risks to Banks

Climate-related financial risks can be grouped into two broad categories: physical risks and transition risks. Physical risks refer to the harm to people and property from acute, climate-related events such as hurricanes, wildfires, floods and heatwaves, and chronic shifts in climate, including higher average temperatures, changes in precipitation patterns, sea level rise, and ocean acidification. Transition risks generally refer to stresses to institutions or sectors arising from the shifts in policy, consumer and business sentiment, or technologies associated with the changes that would be part of a transition to a lower carbon economy.1



Banks are likely to be affected by both the physical risks and transition risks associated with climate change. Weaknesses in how banks identify, measure, monitor, and control climate-related financial risks could adversely affect the safety and soundness of financial institutions.² Physical and transition risks associated with climate change could affect households, communities, businesses, and government damaging property, impeding business activity, affecting income, and altering the value of assets and liabilities. These risks may be propagated throughout the economy and financial system. As a result, the financial sector may experience credit and market risks associated with loss of income, defaults, and changes in the value of assets; liquidity risks associated with changing demand for liquidity; operational risks associated with disruptions to infrastructure or other channels; or legal risks.3

¹ Principles for Climate-Related Financial Risk Management for Large Financial Institutions, 88 Fed. Reg., 74183-74189 (October 30, 2023). The Risk Review is a retrospective review of risks in 2023, and this section focuses solely on physical risk from severe climate and weather events that occurred in 2023

² Principles for Climate-Related Financial Risk Management for Large Financial Institutions, 88 Fed. Reg., 74183-74189 (October 30, 2023).

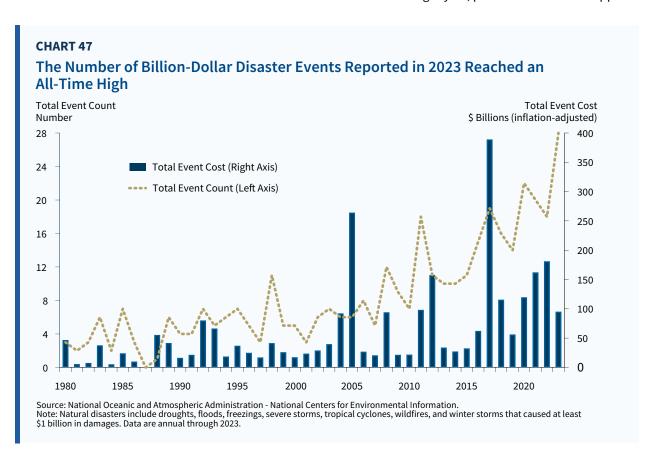
³ Financial Stability Oversight Council, "Report on Climate-Related Financial Risk 2021," October 21, 2021.

The number of severe climate and weather-related events, defined as events with estimated inflationadjusted damages of \$1 billion or more, reached a **new high in 2023.** There were 28 weather and climaterelated events exceeding \$1 billion each during 2023, the highest number of these events on record.72 The number of weather and climate-related events over \$1 billion has consistently trended up since the National Oceanic and Atmospheric Administration (NOAA) started tracking these data in 1980 (Chart 47). Although the number of these events reached a record high, the total event cost incurred in 2023 was \$92.9 billion, down considerably from nearly \$180 billion in 2022.73 Since 1980, there have been 376 severe climate and weather events costing more than \$2.6 trillion in total.

Severe storms, drought, and wildfires accounted for the vast majority of significant climate events in

2023. A record number of severe storms (19) crossed the \$1 billion damage threshold in 2023. These severe storms included hundreds of tornadoes, hailstorms, and storms with high winds. The most expensive severe storm in 2023, which occurred in March, affected seven southern and eastern states as high winds and tornadoes caused \$6 billion in damages to homes, vehicles, businesses, and infrastructure.74

Drought conditions affected numerous southern and midwestern states in 2023, damaging field crops from lack of rainfall and forcing some ranchers to sell off livestock early due to high feeding costs.75 For the second straight year, portions of the Mississippi



⁷² NOAA National Centers for Environmental Information (NCEI) U.S. Billion-Dollar Weather and Climate Disasters. https://www.ncei.noaa.gov/access/billions/,

⁷³ The primary reason that the costs incurred from severe climate and weather events were lower in 2023 is that the United States was spared a major hurricane affecting a major metropolitan area. Still, NOAA has stated that the total cost figure for 2023 may rise by several billion once the agency has fully accounted for the costs of a major storm and flooding event that occurred in December 2023. See Adam B. Smith, "2023: A Historic Year of U.S. Billion-Dollar Weather and Climate Disasters," NOAA, January 8, 2024.

⁷⁴ Texas, Alabama, Mississippi, Tennessee, Kentucky, Indiana, and Ohio.

⁷⁵ Texas, Louisiana, Oklahoma, Kansas, Illinois, Missouri, and Nebraska.

River experienced low water levels, affecting river commerce.⁷⁶ In addition, the Colorado River Basin has reported successive years of low water levels because of ongoing drought conditions.

In August of 2023, devastating wildfires encompassed the island of Maui, Hawaii, and destroyed the historic town of Lahaina. High winds from Hurricane Dora that hit the island concurrently exacerbated the wildfire, known as the Maui firestorm, which ultimately destroyed nearly 3,000 structures in a 4.5 square kilometer area. The Maui firestorm caused an estimated \$5.6 billion in damages and was the deadliest U.S. wildfire in more than a century with more than 100 fatalities.77

Some climate-related events caused adverse effects in regions that have not traditionally been exposed to such events, and the damage extended far beyond the event's initial site. For example, the 2023 Canadian wildfires saw smoke and air pollution drift hundreds of miles outside of the fire perimeter, blanketing much of the central and eastern United States.⁷⁸ Despite not reaching NOAA's billion-dollar threshold, the widespread nature of this and other events underscores the uncertainty associated with climate change.

While insurance policies may cover some or all of the loss associated with many severe climate and weather events, policies are becoming more expensive or unavailable. Insurers play an important role in the financial system by absorbing losses stemming from physical risks. 79 However, the insurance industry has experienced poor financial performance in recent years due to unexpectedly high

inflation, a shift of exposures to higher risk areas, and rising reinsurance costs. In addition, the insurance industry is incurring rapidly rising losses from more frequent and severe weather events.80 In the face of these growing challenges, many private insurance companies have reassessed their typical operating models. Some insurers have sought to raise prices on premiums, reducing insurance affordability for homeowners. While some insurance companies have increased their rates, others have declined to offer new policies. 81 For example, in 2023, two large homeowner insurance companies announced that they would pause issuing new policies in California, citing rising exposure to catastrophes as the primary reason.82 American International Group also reduced property insurance coverage to homes along the East Coast at risk of flooding and those in the western United States at risk of burning.83

When insurance becomes unavailable or too costly, some homeowners choose to go without it.84 According to reports, more than 12 percent of homeowners nationwide have chosen to forgo home insurance.85 A lack of insurance makes the recovery from natural disasters more difficult for affected individuals and communities. If the area damaged from a natural disaster is sufficiently large, there could also be macroeconomic effects that negatively affect financial institutions exposed to a substantial number of affected properties.86 According to the Financial Stability Oversight Council, increasing climate-related losses and decreasing insurance coverage for these losses could increase financial institution exposure to disaster risk and may have financial stability implications.87

⁷⁶ Brian K. Sullivan, "<u>America's Most Crucial Waterway Is Drying Out</u>," Bloomberg, July 14, 2023.

⁷⁷ Rachel Treisman, "Maui's Wildfires Are Among the Deadliest on Record in the U.S. Here Are Some Others," National Public Radio, August 15, 2023.

⁷⁸ Xudong An, Stuart A. Gabriel, and Nitzan Tzur-Ilan, "Extreme Wildfires, Distant Air Pollution, and Household Financial Health," (Working Paper no. 24-1, Federal Reserve Bank of Philadelphia, January 2024).

⁷⁹ Financial Stability Oversight Council, <u>Annual Report 2023</u>, December 14, 2023.

⁸⁰ Arthur Fliegelman, "Wind, Fire, Water, Hail: What Is Going on in the Property Insurance Market and Why Does It Matter?," Office of Financial Research, December 14, 2023.

⁸¹ Alice C. Hill, "Climate Change and U.S. Property Insurance: A Stormy Mix," Council on Foreign Relations, August 17, 2023.

⁸² Emily DeLetter, "Allstate No Longer Offering New Policies in California due to Wildfires, Other Costs," USA Today, June 5, 2023; and State Farm, "State Farm General Insurance Company: California New Business Update," press release, May 26, 2023.

⁸³ Jean Eaglesham, "Home Insurers Curb New Policies in Risky Areas Nationally," Wall Street Journal, June 8, 2023.

⁸⁴ In addition to home insurance, auto policies are becoming increasingly expensive or harder to obtain in many areas facing rising losses due to severe climaterelated events. See Jean Eaglesham, "Buying Home and Auto Insurance is Becoming Impossible," Wall Street Journal, January 8, 2024.

⁸⁵ Insurance Information Institute, "Homeowners Perceptions of Weather Risks: 2023Q2 Consumer Survey," June 2023.

⁸⁶ Fliegelman, "Wind, Fire, Water, Hail: What Is Going on in the Property Insurance Market and Why Does It Matter?"

⁸⁷ Financial Stability Oversight Council, Annual Report 2023.

It is also important for the federal banking agencies to promote consistency in climate-related financial risk management. After previously issuing separate proposals, the FDIC, the Board of Governors of the Federal Reserve System, and the Office of the Comptroller of the Currency (OCC) (the agencies) jointly developed final principles for climate-related financial risk management for large financial institutions, which were issued as guidance in October 2023.88 Although all financial institutions, regardless of size, may have material exposures to climate-related financial risks, the principles are intended to support efforts by the largest financial institutions (those with more than \$100 billion in total consolidated assets) to focus on key aspects of climate-related financial risk management. Importantly, the agencies recognize that both the effects of climate change and the actions

that financial institutions may take to manage climaterelated financial risks could disproportionately affect low- and moderate-income consumers and other underserved consumers and communities. The agencies expect financial institutions to manage climate-related financial risks in a manner that will allow them to continue to prudently meet the financial services needs of their communities, including low- and moderate-income consumers and other underserved consumers and communities, and to ensure compliance with fair housing and fair lending laws.

Going forward, the FDIC will continue to engage with other regulators and the industry on how best to address climate-related financial risk.

⁸⁸ Principles for Climate-Related Financial Risk Management for Large Financial Institutions.



SECTION 7

Crypto-Asset Risks

- · While limited, crypto-asset-related activities can pose novel and complex risks to the U.S. banking system that are difficult to fully assess.
- · The FDIC, in coordination with the other federal banking agencies, has taken steps to closely monitor crypto-asset-related activities of banking organizations.
- · In December 2023, the FDIC updated part 328 of its regulations to modernize the rules governing use of the official FDIC sign and amended the definition of "non-deposit product" to include crypto-assets.

While limited, crypto-asset-related activities can pose novel and complex risks to the U.S. banking system that are difficult to fully assess. Some of the challenges banks may face in assessing these risks arise from the dynamic nature of crypto-assets, the crypto marketplace, and the rapid pace of innovation. Key risks associated with crypto-assets and cryptoasset sector participants include those related to fraud, legal uncertainties, misleading or inaccurate representations and disclosures, risk management practices exhibiting a lack of maturity and robustness, and platform and other operational vulnerabilities.

The FDIC, in coordination with the other federal banking agencies, has taken steps to closely monitor crypto-asset-related activities of banking organizations. In 2022, the FDIC developed processes to engage in robust supervisory discussions with banking organizations regarding proposed and existing crypto-asset-related activities, and, in 2023, provided case-specific supervisory feedback to supervised institutions engaging in or planning to engage in these activities.89 Case-specific feedback focuses on assessing the ability of the supervised institution to perform the activity in a safe and sound manner, and in compliance with applicable laws and regulations, including consumer protection. Throughout 2023, the FDIC continued to monitor and review the level of interest and adoption of cryptorelated activities by supervised institutions to inform its supervisory and policy work.

In 2023, the FDIC, in coordination with the other federal banking agencies, issued interagency statements related to crypto-assets. First, in January 2023, the FDIC, Federal Reserve, and OCC released a joint statement on crypto-asset risks to banking organizations.90 The statement reminds banking organizations that they should ensure that cryptoasset-related activities can be performed in a safe and sound manner, are legally permissible, and comply with applicable laws and regulations, including those designed to protect consumers (such as fair lending laws and prohibitions against unfair, deceptive, or abusive acts or practices).

Second, in February 2023, the FDIC, Federal Reserve, and OCC issued a Joint Statement on Liquidity Risks to Banking Organizations Resulting from Crypto-Asset Market Vulnerabilities on the liquidity risks to banking organizations presented by certain sources of funding from crypto-asset-related entities.⁹¹ This statement highlights key liquidity risks associated with crypto-assets and crypto-asset sector participants that banking organizations should be aware of. In particular, certain sources of funding from crypto-asset-related entities may pose heightened liquidity risks to banking organizations due to the unpredictability of the scale and timing of deposit inflows and outflows. The statement reminds banking organizations to apply existing risk management principles and provides examples of practices that

⁸⁹ On April 7, 2022, the FDIC issued FIL-16-2022, Notification of Engaging in Crypto-Related Activities, which asked supervised institutions to notify the FDIC if they are engaging in, or planning to engage in, crypto-asset-related activities.

⁹⁰ <u>Joint Statement on Crypto-Asset Risks to Banking Organizations</u>, January 3, 2023.

⁹¹ Joint Statement on Liquidity Risks to Banking Organizations Resulting From Crypto-Asset Market Vulnerabilities, February 23, 2023.

could be effective. The agencies also continue to emphasize that banking organizations are neither prohibited nor discouraged from providing banking services to customers of any specific class or type, as permitted by law or regulation.

In December 2023, the FDIC updated part 328 of its regulations to modernize the rules governing use of the official FDIC sign and amended the definition of "non-deposit product" to include crypto-assets. The regulation requires the use of signs that differentiate insured deposits from non-deposit products across banking channels and disclose that

certain non-deposit products are not insured by the FDIC, are not deposits, and may lose value. In addition, as noted above, the regulatory definition of non-deposit product was updated to include crypto-assets.

In 2023, the FDIC issued a number of letters demanding persons or entities cease and desist from making false or misleading representations about the existence of deposit insurance, misusing the name or logo of the FDIC, or knowingly misrepresenting the extent and manner of deposit insurance.

ACRONYMS AND ABBREVIATIONS

AI	Artificial Intelligence
C&D	Construction and Development
C&I	Commercial and Industrial
Call Reports	Consolidated Reports of Condition and Income
CBLR	Community Bank Leverage Ratio
CLO	Collateralized Loan Obligation
CMBS	Commercial Mortgage-Backed Securities
CRE	Commercial Real Estate
DDoS	Distributed Denial of Service
FDIC	Federal Deposit Insurance Corporation
FHLB	Federal Home Loan Bank
FinCEN	Financial Crimes Enforcement Network
FOMC	Federal Open Market Committee
GDP	Gross Domestic Product
GSIB	Global Systemically Important Bank
KBW	Keefe, Bruyette, and Woods (Bank Index)
LCD	Leveraged Commentary and Data (S&P)
NDFI	Nondepository Financial Institution
NFIB	National Federation of Independent Businesses
NIM	Net Interest Margin
NOAA	National Oceanic and Atmospheric Administration
occ	Office of the Comptroller of the Currency
OPEC	Organization of the Petroleum Exporting Countries
PDNA	Past-Due and Nonaccrual Loans
RaaS	Ransomware-as-a-Service
S&P	Standard and Poor's (S&P 500)
SNC	Shared National Credit
USDA	U.S. Department of Agriculture



GLOSSARY OF TERMS

Bond	. A certificate of indebtedness issued by a government or corporation.
Call Report	. A report of a bank's financial condition that is filed quarterly with the FDIC and known officially as the Report of Condition and Income.
Capital	. The net worth or value that remains if an institution paid off all of its liabilities. At its core, bank capital is equity. Bank capital or equity can be expressed by the basic accounting formula: Assets – Liabilities = Equity.
Central Bank	. An institution that oversees and regulates the banking system and quantity of money in the economy. The Federal Reserve System is the central bank of the United States.
Collateral	. Property required by a lender and offered by a borrower as a guarantee of payment on a loan. Also, a borrower's savings, investments, or the value of the asset purchased that can be seized if the borrower fails to repay a debt.
Collateralized Loan Obligations (CLOs)	. Securitization vehicles backed predominantly by commercial loans.
Community Bank	. FDIC-insured institutions meeting the criteria for community banks as defined in the FDIC's 2012 Community Banking Study. Noncommunity banks are banks that do not meet these criteria.
Crypto-Assets	. Private sector digital assets that depend primarily on the use of cryptography and distributed ledger or similar technologies. The term encompasses many assets commonly referred to as "coins" or "tokens" by market participants.
Default	. Failure to promptly pay interest or principal when due.
Farm Bank	. A bank with agricultural production loans plus real estate loans secured by farmland equal to or exceeding 25 percent of total loans and leases.
	. The interest rate at which a depository institution lends funds that are immediately available to another depository institution overnight.
High Yield	A term that is generally synonymous with noninvestment grade, which refers to the lowest-rated bonds subjected to third-party credit risk assessments by nationally recognized statistical ratings organizations. In the United States, noninvestment grade bonds are typically rated Ba1 or below by Moody's or BB+ or below by Standard & Poor's or Fitch.

assessments by nationally recognized statistical rating organizations. In the United States, investment-grade bonds are typically rated Baa3 or above by Moody's or BBB- or above by Standard & Poor's or Fitch. services industry and commonly contain some combination of the following: Proceeds used for buyouts, acquisitions, or capital distributions. Transactions in which the borrower's total debt divided by EBITDA (earnings before interest, taxes, depreciation, and amortization) or senior debt divided by EBITDA exceeds 4.0X EBITDA or 3.0X EBITDA, respectively, or other defined levels appropriate to the industry or sector. A borrower recognized in the debt markets as a highly leveraged firm, which is characterized by a high debt-to-net-worth ratio. • Transaction in which the borrower's post-financial leverage, as measured by its leverage ratios (for example, debt-to-assets, debt-tonet-worth, debt-to-cash flow, or other similar standards common to particular industries or sectors), significantly exceeds industry norms or historical levels. **Liquid Assets** Interest-bearing and noninterest-bearing deposits, fed funds sold, reverse repurchase agreements, and the fair value of available-for-sale and held-tomaturity securities less the value of pledged securities. Loans and debt securities with remaining maturities or repricing intervals of more than three years. **Negative Equity.**..... A situation in which a borrower's mortgage principal is greater than the value of the underlying collateral, often real estate. Net Interest Margin The difference between interest and dividends earned on interest-bearing assets and interest paid to depositors and other creditors, expressed as a percentage of average earning assets. No adjustments are made for interest income that is tax exempt.

institutions. Noncurrent Loans and Leases The sum of loans and leases 90 days or more past due, and loans and leases in nonaccrual status.

Nonaccrual Loans and Leases Loans and leases 90 or more days past due and for which payment in full of principal or interest is not expected.

Nonbank Firms that are not part of or affiliated with FDIC-insured depository

members of the Organization of the Petroleum Exporting Countries (OPEC) and ten non-OPEC partner countries.

Past-Due Loans and Leases Loans and leases 30 days or more past due and still accruing interest.

threaten their continued financial viability. Federal regulators assign a composite rating to each financial institution based upon an evaluation of financial and operational criteria. The rating is based on a scale of 1 to 5 in ascending order of supervisory concern. Depending upon the degree of risk and supervisory concern, problem banks are rated either "4" or "5."

Real Gross Domestic Product..... The total market value of all final goods and services produced in an economy in a given year calculated by using a base year's price for goods and services; nominal GDP adjusted for inflation.

decline in general economic activity over a period.

Short-Term Liquid Assets Cash and due from accounts, federal funds sold, securities purchased under resale agreements, and securities maturing in less than one year.

Treasury Yield The effective interest rate paid by the U.S. government to borrow money for different lengths of time. It is the return on investment on the government's debt obligations.

Wholesale Funding Federal funds purchased and securities sold under agreement to repurchase; borrowings from the Federal Home Loan Bank; brokered and listing service, municipal and state, and foreign deposits; and other borrowings (such as from the Federal Reserve's Payment Protection Program Liquidity Facility). Providers of wholesale funding closely track institutions' financial condition and may cease or curtail funding, increase interest rates, or increase collateral requirements if they determine an institution's financial condition is deteriorating.

> .. The relationship between maturities and interest rates on government bonds. The yield curve captures the cost of borrowing money to finance consumption, investment, or government spending and thus is of central importance to the entire economy. Yield curves generally exhibit three different shapes—normal, flat, and inverted—which are characterized by long-term interest rates being above, similar to, or below short-term interest rates. The shape of the yield curve often is viewed as an indicator of future economic activity.

Yield Curve.....



