

SECTION 3

Credit Risks

Agriculture

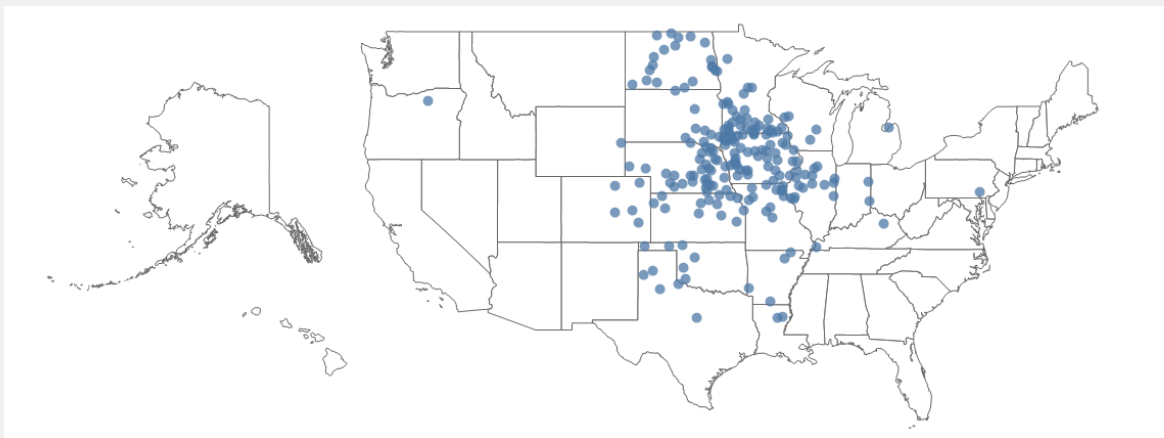
- The agricultural sector earned record profits in 2022 despite widespread drought conditions. Farm income is forecast to decline in 2023 due to higher interest rates and rising expenses but remain above its long-term average.
- Loan growth and higher loan yields boosted farm bank earnings in first quarter 2023 following a down year in 2022.²² Liquidity ratios at farm banks declined from previous highs but remained above the ten-year average.
- Stronger farm sector financial conditions led to improved farm bank asset quality through first quarter 2023, but higher interest rates and production costs pose challenges.

There were 1,015 farm banks comprising more than one-fifth of all banks as of first quarter 2023. All but 11 of these banks are also considered community banks by the FDIC's definition (see Glossary of Terms). In first quarter 2023, agricultural loans held by all banks totaled \$183.6 billion.

- Community banks hold 69 percent (\$127 billion) of total agriculture loans.
- More than 20 percent of farm banks (220 banks, or 4.7 percent of all banks) hold a concentration of agricultural loans above 300 percent of capital (tier 1 capital and credit loss reserves for loans and leases).
- Exposure to agriculture lending is concentrated in the Midwest.

Regional Exposure to Agricultural Lending

Dots on the map represent the 220 banks with total agricultural loans above 300 percent of capital.



Source: FDIC.

²² Unless otherwise noted, banking data are for farm banks only.

The agricultural sector earned record profits in 2022 despite widespread drought conditions. The U.S. Department of Agriculture (USDA) forecasts that 2022 net farm income rose 15.5 percent year over year to \$162.7 billion, a record high on an inflation-adjusted basis.²³ Growth in crop and livestock revenues more than offset higher production expenses and lower government payments (Chart 13).²⁴ Higher commodity prices drove nearly all of the increase in crop and livestock revenue. Prices for various crops climbed to record or near-record highs in the first half of 2022 as the war in Ukraine and the U.S. drought caused supply challenges.²⁵ Prices retreated through first quarter 2023 but remained relatively high for corn, soybeans, and wheat.

During 2022, the share of the nation in moderate or worse drought conditions neared the share recorded during the historically severe drought in 2012 (Chart 14).²⁶ Poor pasture conditions from drought contributed to herd liquidation for many cattle producers, which boosted cattle prices.²⁷ In addition, the price of poultry and eggs rose considerably in 2022 after an outbreak of bird flu, which was the nation's most severe on record.²⁸

Farm income is forecast to decline in 2023 due to higher interest rates and rising expenses but remain above its long-term average. The USDA forecast indicates that farm income will decline nearly 16 percent in 2023 from the 2022 level.²⁹ Factors expected to reduce income include higher interest costs, production costs, and higher purchase costs for livestock and poultry, combined with lower commodity prices.³⁰ Nonetheless, farm income is projected to remain 20.8 percent above the prior 20-year average.

Lower prices and higher input costs will likely tighten crop producer profit margins in 2023, particularly for those producers who rent a significant share of their farmland. Cattle ranchers, on the other hand, are likely to see margins expand because of price strength on the heels of 2022 herd liquidation combined with lower feed costs. Improved drought conditions throughout much of the United States during the first half of 2023 should also benefit the cattle sector.

Strong net farm income bolstered farm real estate (farmland) values in 2022 for a second consecutive year last year. Average U.S. farmland values increased an estimated 12.4 percent on an annual basis in 2022, the largest year-over-year increase since 2006, according to the August 2022 USDA Land Values Summary report.³¹ Three midwestern states—Iowa, Kansas, and Nebraska—reported farmland value increases of more than 20 percent. Cropland values rose 14.3 percent, while pastureland values increased 11.5 percent. First quarter agricultural condition surveys from various Federal Reserve Banks indicated farmland values continued to increase but at a much slower pace than in 2022.

²³ See USDA, [2023 Farm Sector Income Forecast](#), February 7, 2023. The 2022 forecast will become an estimate with the USDA's next forecast release scheduled for August 31, 2023.

²⁴ According to the USDA, crop and livestock receipts increased \$88.7 billion, while production expenses rose \$52.6 billion in 2022. This was the largest nominal year-over-year increase in production expenses on record.

²⁵ For example, wheat prices received by farmers increased 27 percent during the first five months of 2022. Corn and soybean price swings mirrored those of wheat. A decline in the sunflower supply pressures substitutes including soybeans.

²⁶ See the Climate-Related Financial Risk section of this report for more information on U.S. drought conditions in 2022.

²⁷ A survey conducted in late 2022 by the Farm Bureau found that 61 percent of respondents reported selling off portions of their herd, with an average reduction of 33 percent. As of January 1, 2023, the USDA reports that cattle inventories declined 3.6 percent from a year earlier, the largest decline since 1986.

²⁸ According to the USDA, 57.8 million birds were affected by bird flu in 2022, surpassing the previous record of 50.5 million in 2015. The outbreak has continued in 2023, although at a slower pace, with an additional nearly 1 million birds affected from January 1, 2023, through the end of May 2023. As the bird flu outbreak has slowed, egg prices have declined in first quarter 2023, falling more than 20 percent from fourth-quarter 2022 levels. However, prices are still well above historical prices.

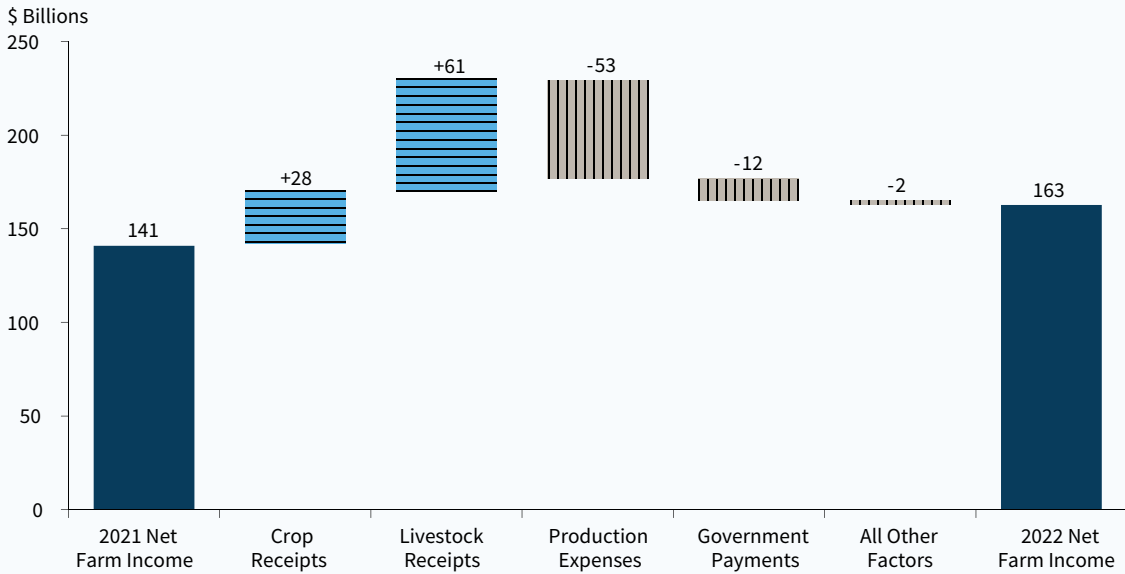
²⁹ See USDA, [2023 Farm Sector Income Forecast](#).

³⁰ The USDA forecast suggests that rising interest rates will drive interest costs higher by 22.4 percent and that livestock and poultry purchase costs will increase 13.6 percent. On an inflation-adjusted basis, production expenses are projected to increase \$5.7 billion (1.3 percent) in 2023, following an 11 percent increase in 2022.

³¹ The land value summary is an annual report with the next release scheduled for August 2023.

CHART 13

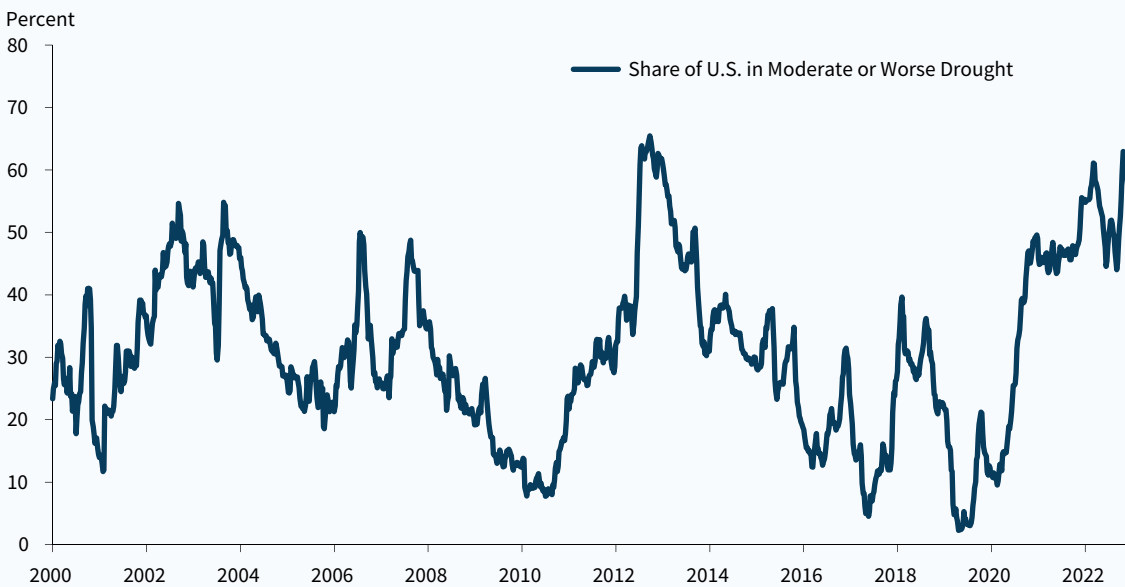
Net Farm Income Increased in 2022 as Higher Revenues More Than Offset Higher Expenses



Source: U.S. Department of Agriculture.
Note: Nominal dollars. Bars show category contribution to net farm income change, with horizontal stripe bars adding to income and vertical stripe bars subtracting from income. Receipt values include home consumption and inventory adjustments.

CHART 14

U.S. Drought Conditions Were Widespread in 2022, Nearing Conditions Recorded During the Historically Severe Drought of 2012



Source: National Drought Mitigation Center (University of Nebraska Lincoln).
Note: Weekly data from January 4, 2000, to December 27, 2022.

The steep rise in farmland values during 2022 outpaced the increase in rents charged to use farmland, causing the ratio of farmland value to rents to reach their highest levels for both cropland and pasture land since data collection began in 1998 (Chart 15). These record ratios suggest that farmland rents may need to increase, thereby pressuring producer margins, in order to return the ratio closer to the historical level. Alternatively, farmland values may decline, weakening the collateral position of farm real estate loans.³²

Loan growth and higher loan yields boosted farm bank earnings in first quarter 2023 following a down year in 2022. The median year-over-year total loan growth for farm banks increased to 8.6 percent in fourth quarter 2022 and 9.3 percent in first quarter 2023. More specifically, agricultural loan growth at farm banks increased to 6.1 percent in first quarter 2023 from 5.4 percent in fourth quarter 2022, with both agricultural production and farm real estate loans increasing (Chart 16). This marked the second consecutive quarter of annual growth in agricultural production loans following a decline in eight of the previous ten quarters. The growth in loans likely reflects increased financing for higher agricultural input costs and a decline in government support payments. Growth in farm loans contributed to an increase in the median agricultural loan to capital concentration ratio, which rose to 209 percent in first quarter 2023, up from 205 percent a year earlier but below the recent first quarter previous peak of 234 percent in 2019.

The median pretax return on assets (ROA) for farm banks for full-year 2022 declined 13 basis points from one year earlier to 1.17 percent on lower net interest margins (NIMs) and a decline in noninterest income. The median farm bank ROA for first quarter 2023 improved to 1.29 percent, up 32 basis points from first quarter 2022. Improved NIM from the combination of loan growth and higher asset yields contributed to the rise in ROA.

Despite recent declines, liquidity ratios at farm banks remained above the long-term average, even though farm banks reported deposit outflows in first quarter 2023. Loan growth contributed to lower on-balance sheet liquidity ratios at farm banks. Consistent with overall bank industry trends, deposits reported by farm banks expanded 3.3 percent in 2022 before contracting nearly 1 percent from a year earlier in first quarter 2023. The combination of increased loan growth and declining deposits led the median on-balance sheet liquidity ratio to decline to 26.6 percent, down from 33.6 percent a year ago. Despite the decline, liquidity ratios reported by farm banks remained above the long-term average of 25.5 percent as of first quarter 2023.

Strong farm income helped improve farm balance sheets and asset quality, but higher interest rates may challenge the farm sector. The record incomes during 2022 allowed producers to replenish working capital and contributed to favorable agricultural asset quality at farm banks. According to surveys of agricultural credit conditions by several Federal Reserve banks, loan repayment rates on agricultural loans increased in 2022 compared to one year earlier.³³ Consistent with these surveys, nearly half (45.3 percent) of farm banks reported having no past-due agricultural loans, a slight improvement from 2021. Further, only 10 percent of farm banks reported agricultural loan net charge-offs in 2022, and the charge-off rate among these banks remained low.

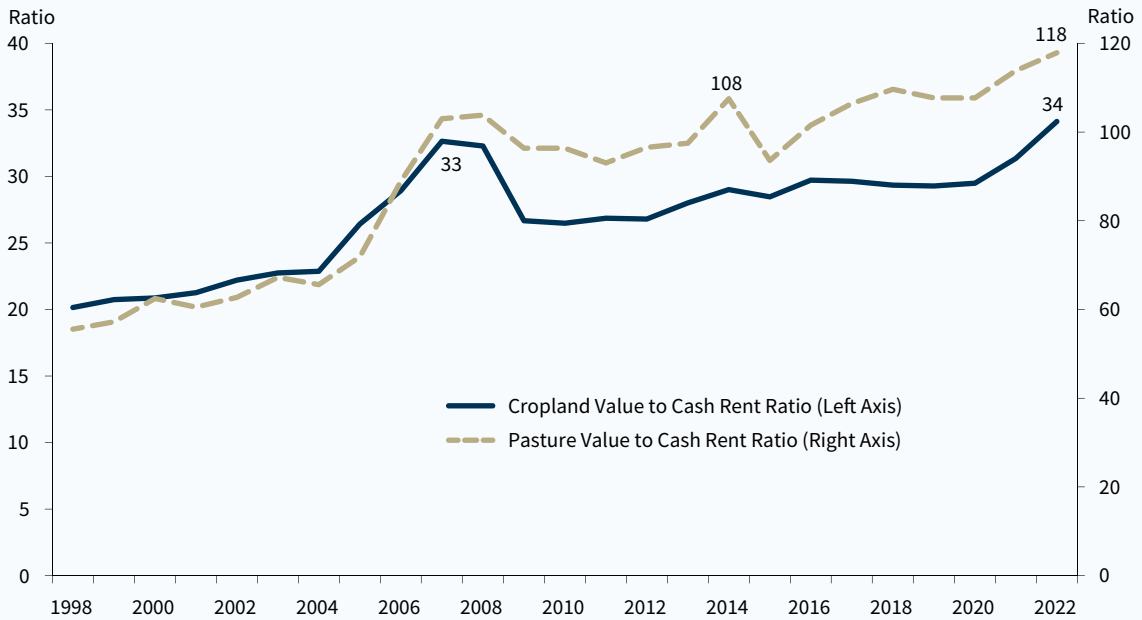
This favorable asset quality trend continued in first quarter 2023. Total agricultural loan past-due and net charge-off ratios remained low, with similar improvements in past-due ratios compared to a year earlier. Among farm banks that report agricultural loans that were past-due or in nonaccrual, the median agricultural loan past-due ratio declined 29 basis points in first quarter 2023 compared to one year earlier and was historically low at 0.72 percent. However, interest rates on operating and real estate loans rose during 2022 and first quarter 2023, which may tighten producer profit margins and adversely affect asset quality of some farm banks this year.

³² For example, the ratio of cropland land values to cash rents was last near its current level in 2008; the following year, cash rent increased 15.8 percent, while values fell 4.3 percent.

³³ [Federal Reserve District Agricultural Credit Surveys for Chicago, Dallas, Kansas City, and Minneapolis Districts, as of first quarter 2023.](#)

CHART 15

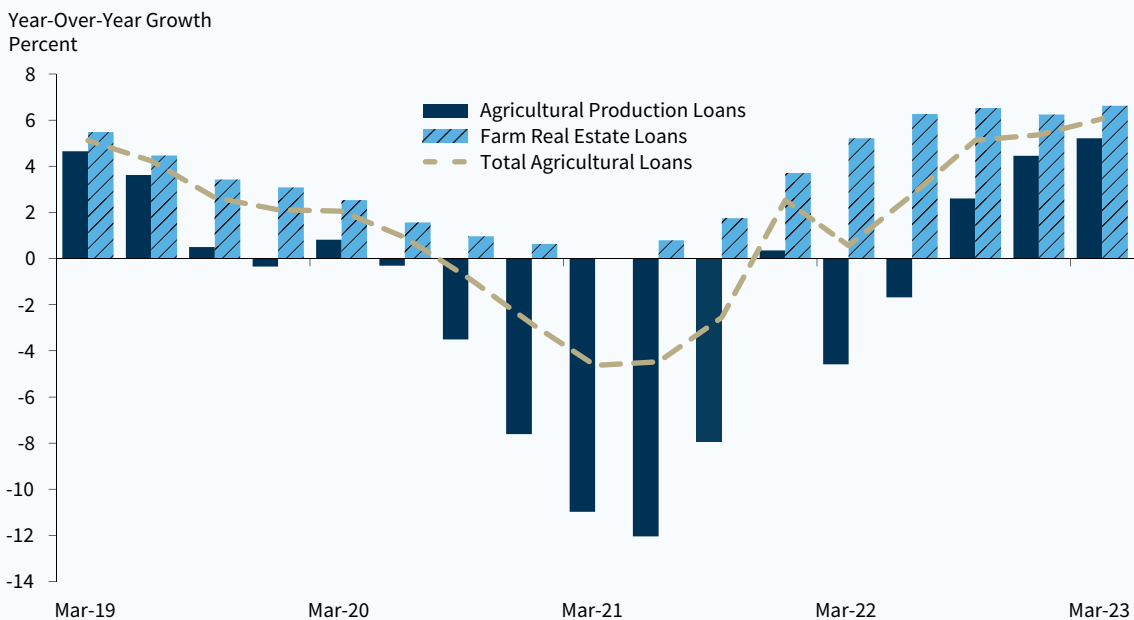
Land Value to Cash Rent Ratios Have Surpassed Their Prior Peaks



Source: U.S. Department of Agriculture.
Note: Data are annual through 2022.

CHART 16

Agricultural Loan Growth Rebounded in 2022 and Early 2023



Source: FDIC.
Note: Data are quarterly figures among farm banks through March 31, 2023.

Commercial Real Estate

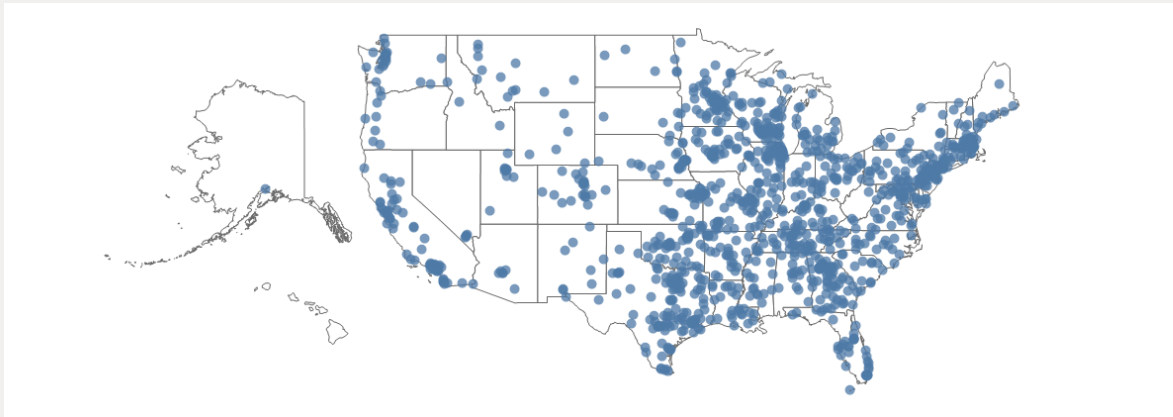
- Most commercial real estate (CRE) property types performed well in 2022, but some challenges continued into 2023, particularly for office properties.
- Bank CRE lending grew and community bank lending remained important to the CRE industry.
- Aggregate CRE asset quality metrics remained favorable, but higher interest rates and economic uncertainty pose risks to CRE loan portfolios.

Bank-held CRE loans reached more than \$3.0 trillion by the end of first quarter 2023.

- Community banks hold 28 percent (\$865 billion) of the CRE loans on bank balance sheets, a share that remains outsized compared to their holdings of 15 percent of total loans.
- Elevated concentrations in CRE lending persist; 30 percent of banks (1,402 banks) have an elevated concentration of CRE loans defined as exceeding 300 percent of capital (tier 1 capital and credit loss reserves for loans and leases) or construction and development (C&D) loans exceeding 100 percent of capital.
- All FDIC Regions saw a rise in the median CRE loan concentration level compared to a year earlier; exposure remained the heaviest in banks headquartered in the West and the Northeast.

Regional Exposure to CRE Lending

Dots on map represent the 1,402 banks (30 percent of all banks) with a concentration of CRE loans, as defined above.



Source: FDIC.

Note: U.S. territories are not included in the map; one bank in Guam with a concentration of CRE loans is not shown.

Four of the five major CRE property types ended 2022 with sound fundamentals, while the office market faced increasing risks through first quarter 2023. Industrial properties continued to benefit from strong demand for warehousing and distribution. Of the major property types, industrial had the highest rent and price growth, while the vacancy rate for industrial properties remained near an all-time low at the end of 2022.³⁴ Conditions in the industrial market remained strong into 2023. But as economic conditions weakened and the pace of construction remained high, some industrial markets became saturated, with supply consistently exceeding demand.

Demand for multifamily properties continued to benefit from the tight single-family housing market. Relatively low single-family home affordability kept many would-be first-time homebuyers in the rental pool. Still, elevated rent levels discouraged some potential renters, and rent growth slowed in late 2022 and into first quarter 2023. Multifamily property price growth also continued to slow.

Retail properties continued to perform well into 2023, supported by sustained consumer spending. Net absorption, the share of space leased net of space vacated, has remained positive for more than two

³⁴ Unless otherwise noted, CRE data are from CoStar as of first quarter 2023.

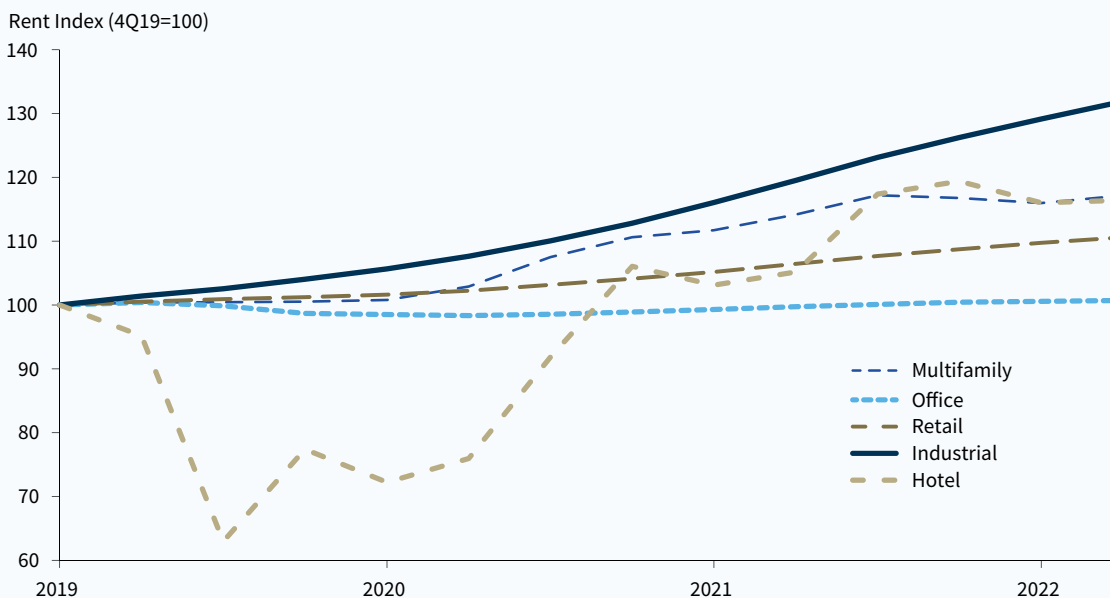
years. The national vacancy rate on retail properties reached a 15-year low, and retailers opened more stores than they closed. Very little new space was added between 2018 and 2022, keeping the market relatively tight.

Consumers also contributed to recovery in the lodging sector. Unleashing pent-up demand for travel, consumers accepted rising hotel room rates. In March 2023, average daily room rates were higher than the March 2019 level in 98 percent of U.S. markets. Similarly, revenue per available room exceeded the 2019 level in 87 percent of markets.³⁵

Unlike other major property types, office fundamentals weakened as the shift to remote work adversely affected office demand, particularly in some larger urban markets. Nationally, office rents remained near pre-pandemic levels in first quarter 2023 in contrast to higher rental rates for the other major property types (Chart 17). While the overall office rental rate

has been relatively stable through first quarter 2023, anecdotal evidence suggests that office property owners have decreased effective rents by increasing rent concessions, such as free rent and allowances for tenant improvements. The increased amount of subleased office space, space that is currently leased but offered by the original tenant for sublet, also has pressured office rents. The amount of office space offered for sublease rose as some companies reduced their office footprint before the expiration date of their existing lease agreement. Office space available for sublease, which is leased at rents discounted from the underlying lease agreement, has increased considerably in the nation's largest office markets and exceeded levels during the Great Recession. San Francisco, with its concentration of tech firms, had the highest rate of sublease availability at 6.3 percent at the end of first quarter 2023, followed by Seattle at 3.2 percent.

CHART 17
Rents for Most Property Types Grew in 2022



Source: CoStar.
Note: Quarterly data through first quarter 2023. Hotel "rent" data are three-month moving averages of the Average Daily Rate, which is reported monthly.

³⁵ CoStar, monthly data as of March 2023.

Office conditions also have been pressured by weakening net absorption of office space since the start of the pandemic. Net absorption has been mostly negative the past three years, which means that more office space has been vacated than has been newly leased from the start of the pandemic through March 2023. Negative net absorption contributed to an increase in the national office vacancy rate from 9.6 percent in first quarter 2020 to 12.8 percent in first quarter 2023. Industry forecasts project further increases in the national office vacancy rate through 2023. Low office attendance by workers suggests weakness in office properties. Access card swipes at a sample of U.S. office buildings indicates attendance was only one-half the pre-pandemic level in early 2023.³⁶

Factors such as reduced occupancy and softening rents has weighed on office property values. Reports suggest that the value of some office properties declined considerably from the beginning of the pandemic through late 2022.³⁷

Banks reported CRE loan growth, contributing to a rise in median CRE loan concentration levels. At first quarter 2023, 98 percent of banks held CRE loans and CRE was the largest loan category for almost half of all banks. CRE loans held by the banking industry have increased every quarter since first quarter 2013. CRE loans comprised a quarter of total loans held by the banking industry, similar to the last cycle peak in 2009. However, CRE loans were about 13 percent of total banking assets at year-end 2022 and through first quarter 2023; this is lower than the 14 percent reported in first quarter 2009.

Growth occurred across all CRE loan types, as well as in unfunded CRE loan commitments, in the four-quarter period ending first quarter 2023. Loans for existing nonfarm nonresidential real estate properties made up the largest portion of the CRE loan portfolio at 58 percent.³⁸ Multifamily loans remained the second-largest CRE loan category, despite a slight decline in first quarter 2023 after increasing in 2022. About 16 percent of the CRE loan portfolio consists of C&D loans, historically the highest risk CRE loan type. Unfunded CRE loan commitments decreased

to \$653 billion at first quarter 2023, after reaching a record high of nearly \$675 billion at year-end 2022, but remain above the last cycle peak in 2007. The unfunded commitments are mostly made up of C&D.

Since first quarter 2022, the industry's median ratio of CRE loans to capital grew from 185 percent to 194 percent, with median concentrations rising across all FDIC Regions. Banks headquartered in the West had the highest median level of CRE loans to capital at 281 percent, followed by banks in the Northeast at 241 percent.

Community bank lending continued to be important to the CRE industry. Community bank CRE loans rose 8 percent from first quarter 2022. Community banks held an outsized proportion of CRE loans: 28 percent of the banking industry's CRE loans compared with only 15 percent of the banking industry's total loans. Community banks headquartered in rural or smaller metropolitan areas held 64 percent of the CRE loan volume reported by banks headquartered in those areas, outpacing community banks in larger metropolitan areas, which held 24 percent of CRE loans reported by banks headquartered in those areas. More than 29 percent of community banks held an elevated concentration of CRE loans to capital, the highest share in more than 12 years.

CRE asset quality metrics remained favorable as past-due CRE loans were generally low, but the outlook remains uncertain. In first quarter 2023, the median CRE past-due loan rate among banks was 0.15 percent and was low across all FDIC Regions. The median past-due rate of 0.19 percent for the subset of 1,402 banks with an elevated CRE concentration level also was historically low compared to previous years. Aggregate CRE loan charge-offs were within historic norms in 2022 and through first quarter 2023.

A modest rise in delinquency rates of commercial mortgage-backed securities (CMBS) may signal a shift in CRE market performance.³⁹ CMBS data provide insight into asset quality by property type that is not available from Call Report data. CMBS

³⁶ Kastle, "Back to Work Barometer," as of May 22, 2023.

³⁷ Peter Grant, "Shrinking Office Building Values Are Becoming a Dilemma for City Budgets," *Wall Street Journal*, December 13, 2022.

³⁸ Nonfarm nonresidential real properties include business and industrial properties, offices, hotels, churches, and other similar properties.

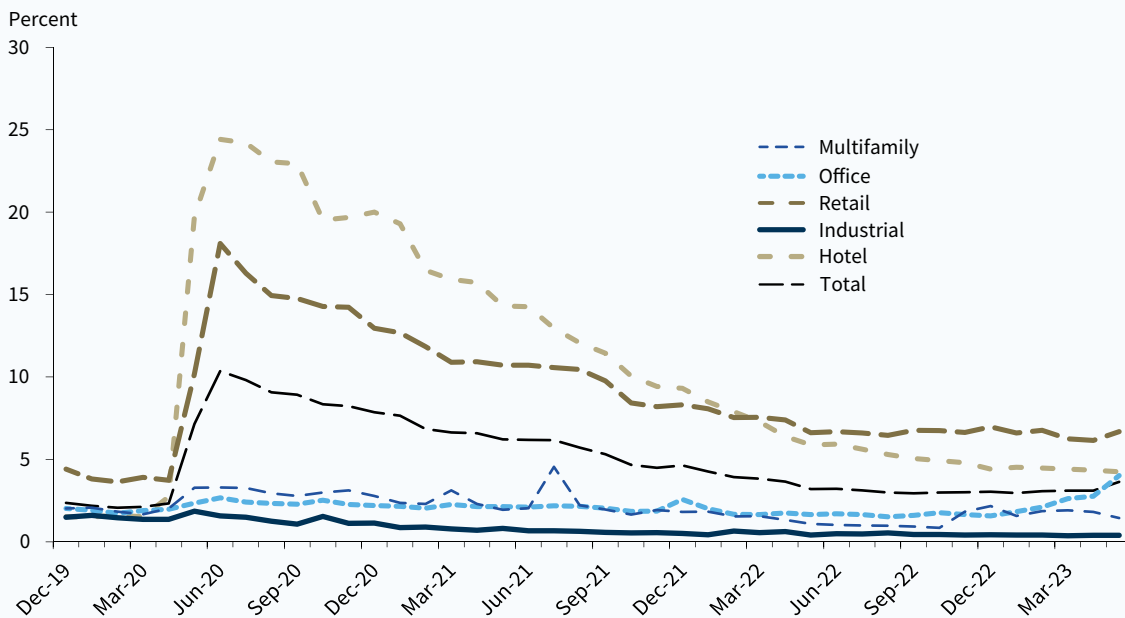
³⁹ CMBS data from Trepp as of May 2023.

delinquency rates steadily improved well into 2022 as retail and hotel loan performance stabilized and other property types showed little change. However, CMBS delinquency rates on office properties began to rise in 2023 (Chart 18). In addition, the share of CMBS loans that are not past due but are in special servicing, meaning loans that are not delinquent but exhibit other potential performance issues, increased particularly among office properties. The increase in CMBS delinquency rates, though small, and the rise in specially serviced CMBS could indicate an inflection point for overall CRE asset quality. Monitoring CMBS delinquency trends also is important as more than 40 percent of banks hold CMBS securities, and CMBS holdings represent at least one-quarter of capital at more than 10 percent of banks.⁴⁰

Higher interest rates and the prospect for weaker economic conditions may stress bank CRE portfolios and constrain loan growth. The high level of unfunded CRE loan commitments may suggest that CRE loans are poised to grow. However, according to an April 2023 survey by the Federal Reserve, bankers reported tighter lending policies and weaker demand for all types of CRE loans over the past year.⁴¹ They also expect to tighten lending standards in 2023 across all loan categories, including CRE.

The office sector is particularly vulnerable to deterioration. With a structural decline in office demand and weak rent growth, some borrowers may have difficulty refinancing. Longer-term leases, which are prevalent in the office sector, helped to insulate

CHART 18
Delinquency Rates Among CMBS Office Loans Are Trending Upward



Source: Trepp.
 Note: Data are monthly figures through May 2023, compiled from Trepp Loan Compendium Deal List.

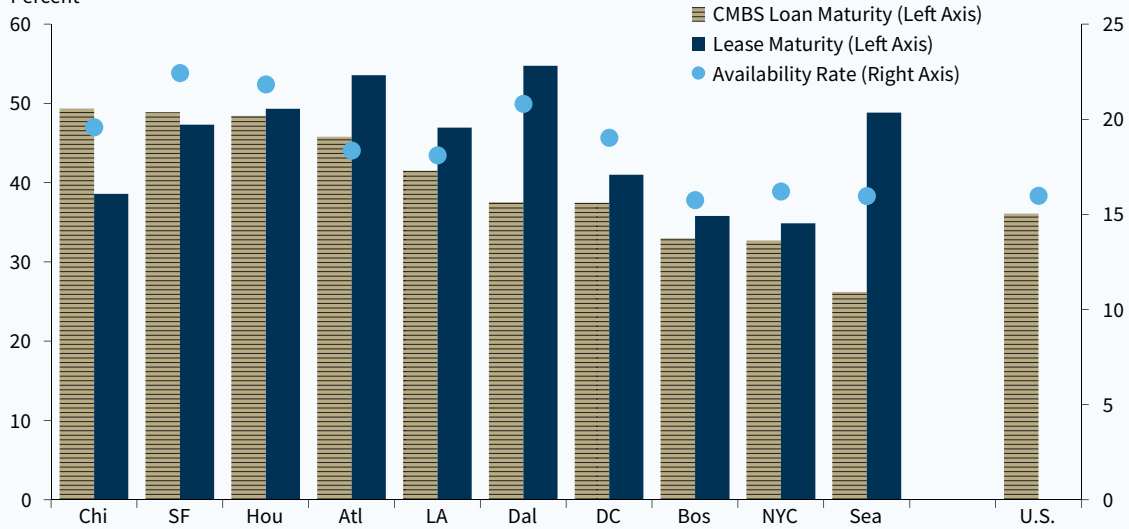
⁴⁰ Defined as CMBS securities held by banks as a share of tier 1 capital plus credit loss reserves for loans and leases.

⁴¹ Board of Governors of the Federal Reserve System, [Senior Loan Officer Opinion Survey on Bank Lending Practices](#), April 2023.

CHART 19

Several U.S. Markets With Substantial Available Space Have a High Share of Loans and Leases Maturing in the Next Few Years

Share of the Volume of Office Loans/Leases Maturing in 2023–2025
Percent



Sources: Trepp (CMBS Loan Maturity) and CoStar (Lease Maturity and Availability Rate).
Note: Loan maturity data as of February 15, 2023, shown as a share of total maturities through 2033 for each MSA. Lease maturity data and availability rate as of first quarter 2023. Lease maturity data not available at the U.S. level.

office property owners from reduced occupancy as tenants continued to pay during 2022. However, the inability to renew expiring leases at viable rental rates, office value erosion, and higher loan-to-value ratios could make refinancing more difficult for some property owners without raising additional capital. A sample of leases in some of the nation’s largest markets shows a preponderance of expirations in

the next few years (Chart 19). Even absent further economic slowdown, some borrowers may face potentially higher interest rates and debt servicing costs or encounter other challenges refinancing. Amid these evolving challenges for banks and their borrowers, strong risk-management practices are essential for operating sound CRE lending programs.

Consumer Lending

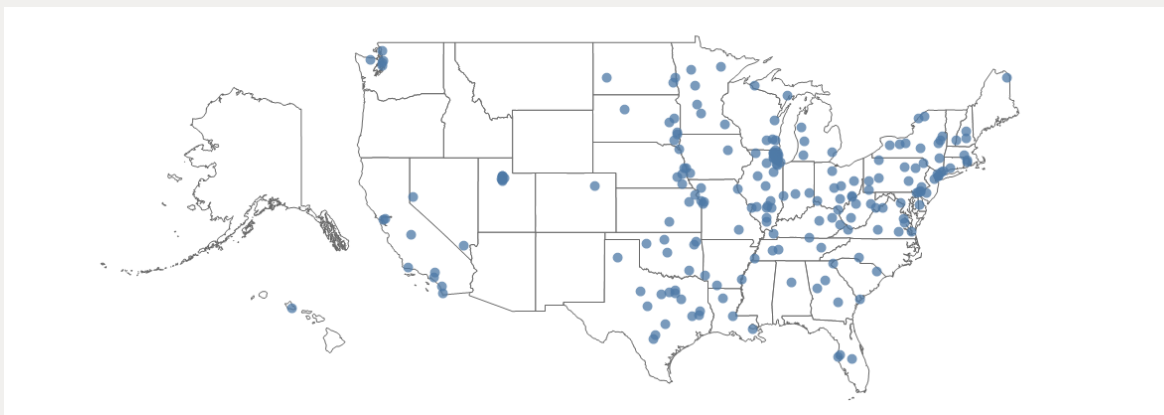
- Strong labor markets continued to support consumers, but a combination of factors including high inflation, rising interest rates, increased consumer debt, and stock market declines strained consumer balance sheets in 2022 and first quarter 2023.
- Credit card loans led consumer loan growth at banks, while auto loan growth slowed.
- Asset quality measures for most consumer loan types were better than pre-pandemic levels through first quarter 2023 but showed early signs of weakening. Auto loan asset quality worsened, though net charge-offs remained low.

Consumer loans held by FDIC-insured institutions totaled \$2.0 trillion as of first quarter 2023.

- Community banks hold 4.1 percent (\$84 billion) of total banking industry consumer loans.
- Concentration in the industry remains low. Only 4.7 percent of all banks (221 banks) hold a concentration of consumer loans above 100 percent of capital (tier 1 capital and credit loss reserves for loans and leases), including several credit card banks with concentrations above 300 percent.
- Sixty-seven percent of banks (148 banks) with a concentration of consumer loans are community banks.

Regional Exposure to Consumer Lending

Dots on the map represent the 221 banks (4.7 percent of all banks) with total consumer loans above 100 percent of capital.



Source: FDIC.

Note: U.S. territories are not included in the map; three banks in Puerto Rico and one bank in Guam that have a concentration of consumer loans are not shown.

Strong labor markets supported consumers, but high inflation and rising interest rates strained household budgets. As the unemployment rate hovered near historically low levels, strong labor markets helped support nominal income. The tight labor market contributed to stronger nominal wage growth, but wage gains did not keep up with inflation in 2022, causing real disposable personal income (DPI) to fall from a year earlier (Chart 20). The decline also reflected the end of government support programs, which had contributed to strong income growth in 2020 through first quarter 2021. Real DPI grew quarter over quarter in the second half of 2022 and first quarter 2023 as

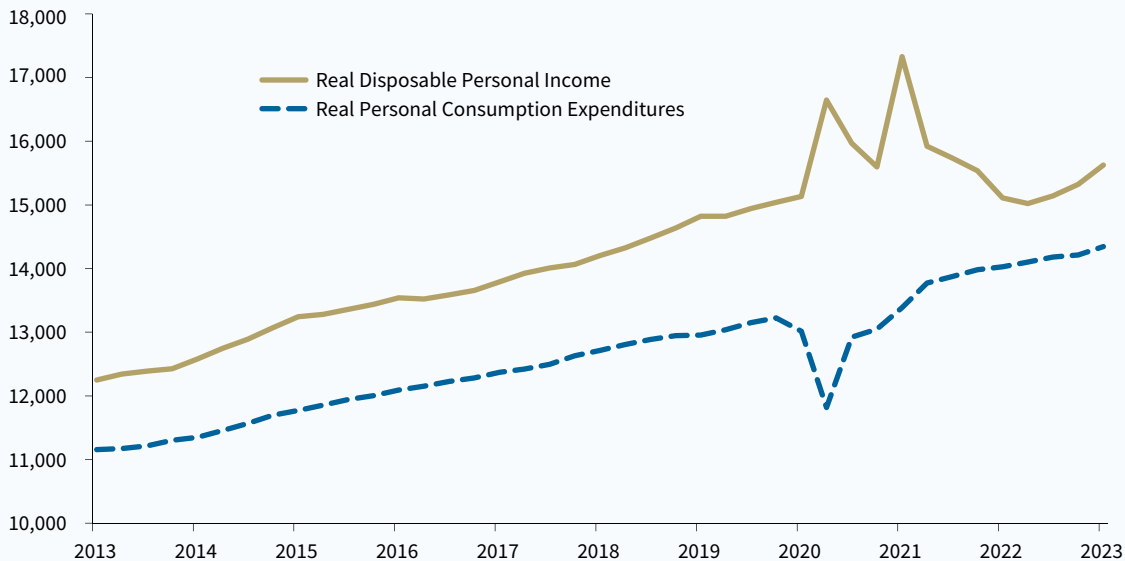
inflation moderated, and real DPI rose above the year-earlier level in the first quarter. Real consumer spending continued to grow in 2022 and first quarter 2023.

Higher inflation contributed to the decline in the household savings rate from the highs in 2020 and first quarter 2021 to near historic lows by the end of third quarter 2022 (Chart 21). In fourth quarter 2022 and first quarter 2023, the savings rate rose but remained below its 2019 pre-pandemic level. Higher inflation may have also contributed to increased consumer debt levels and a rise in the household debt-to-income ratio. In 2022, consumers were paying more for their

CHART 20

Real Income Declined in 2022 After Growing Strongly in 2020 and 2021

Real Income and Spending
\$ Billions



Source: Bureau of Economic Analysis (Haver Analytics).

Note: Income and spending are seasonally adjusted at an annual rate. Quarterly data through first quarter 2023.

purchases even as they may have cut back on other spending. Mortgage debt also increased last year. Together, these factors contributed to an increase in the total household debt-to-income ratio. After declining during the pandemic, the ratio of household debt to income normalized in 2022, rising to pre-pandemic levels.

Stock market declines also stressed household balance sheets. The S&P 500 fell about 18 percent in 2022 and ended first quarter 2023 up 7.5 percent from the start of the year. Lower stock market value since 2021 contributed to a year-over-year decline in aggregate household assets in the second half of 2022 and first quarter 2023. Higher debt and lower asset values caused household net worth to decline from a year earlier in the second half of 2022 and first quarter 2023.

Consumer loan balances at banks grew from a year earlier in 2022 and in first quarter 2023 led by strong credit card loan growth. Credit card loans are about half of all consumer loans held by banks; auto loans and other consumer loans make up the other half. Credit card loans rebounded strongly in 2022 and first quarter 2023 after falling from second quarter 2020 through second quarter 2021 (Chart 22). Credit card loans surpassed their pre-pandemic level in second quarter 2022 and by first quarter 2023 were about 14 percent higher than in first quarter 2019.⁴² Growth of auto loan balances slowed for the banking industry overall in 2022 and first quarter 2023 but accelerated at community banks.⁴³

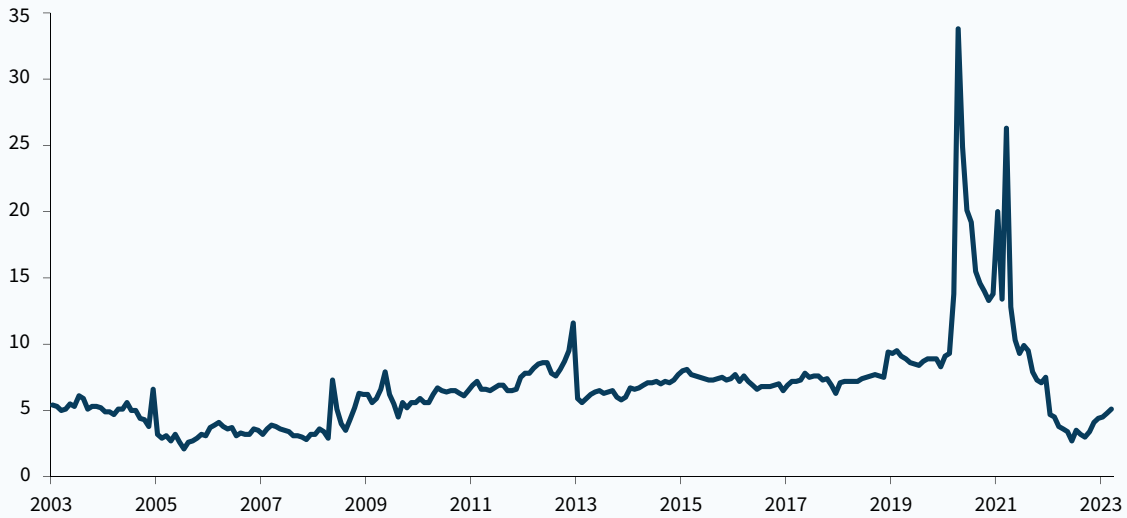
⁴² Credit card loan balances are highly seasonal and rise from first quarter to fourth quarter, so we compare first quarter 2019 to first quarter 2023.

⁴³ Community banks hold a relatively small share, 6 percent, of total auto loan balances held by the banking industry.

CHART 21

The Savings Rate Fell Close to Historical Lows in 2022 After Spiking During the Pandemic

Personal Savings as a Share of Disposable Income
Percent

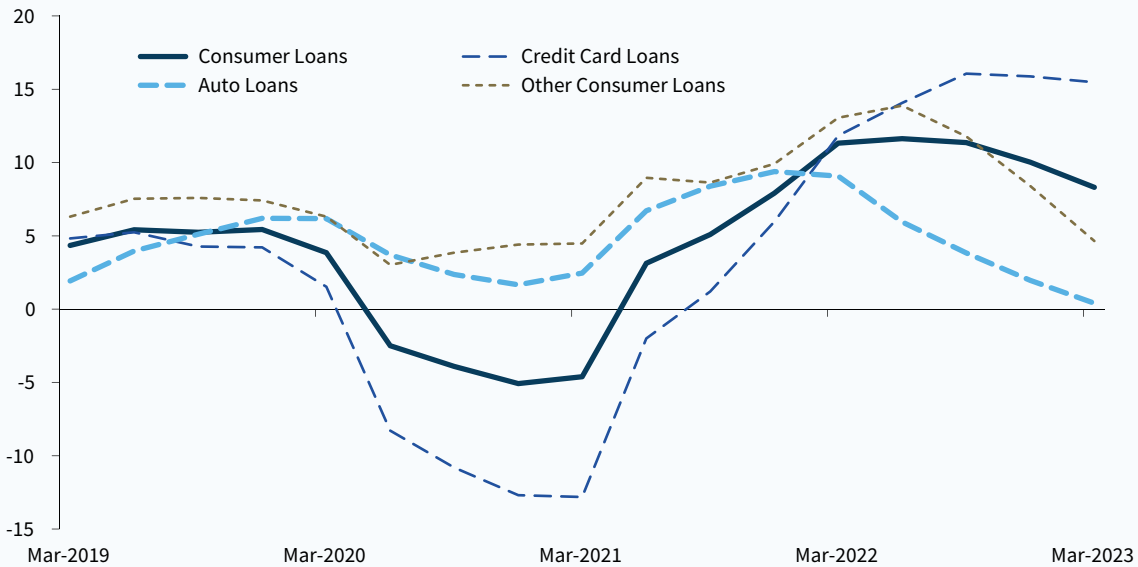


Source: Bureau of Economic Analysis (Haver Analytics).
Note: Monthly data through March 2023.

CHART 22

Credit Card Loans Led Loan Growth at Banks in 2022

Year-Over-Year Growth
Percent



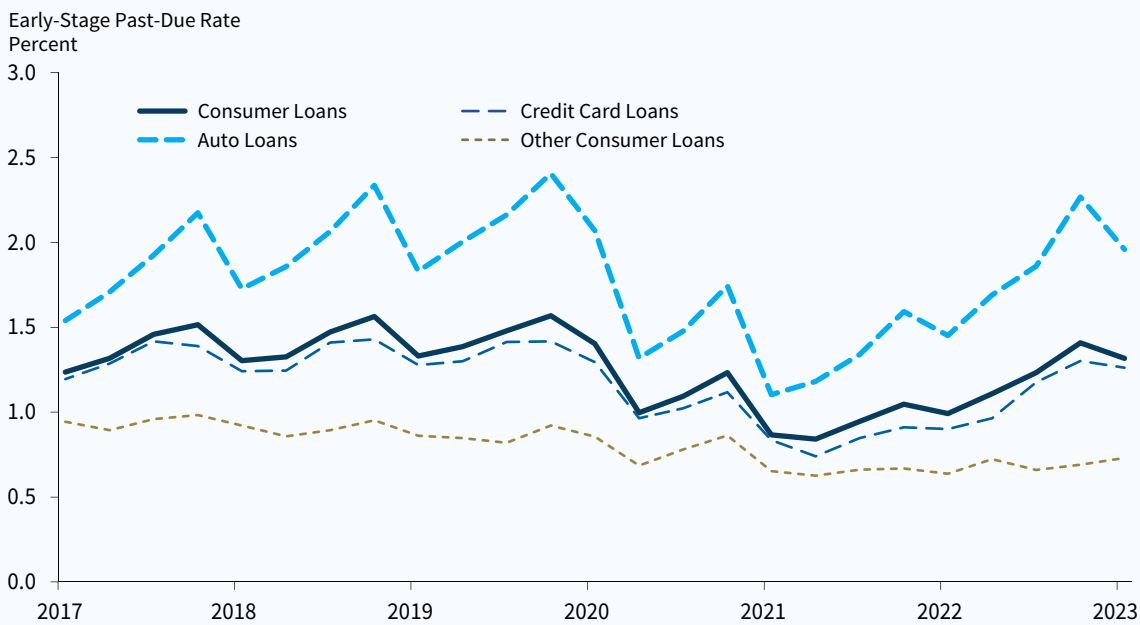
Source: FDIC.
Note: Quarterly data through first quarter 2023.

Early signs of consumer loan performance problems emerged at banks, primarily among auto loans, but consumer loan asset quality measures generally remained favorable. Early-stage past-due rates—the share of loan balances 30 to 89 days delinquent—for auto and credit card loans rose throughout 2022 and fell in first quarter 2023 following seasonal trends (Chart 23). The early-stage past-due rate for credit cards in first quarter was about the same as the rate in first quarter 2019, while the rate for auto loans was above its first quarter 2019 level. In first quarter 2023, total consumer loans also exhibited similar trends for noncurrent rates—the share of loans more than 90 days past due or in nonaccrual status.

While overall asset quality measures for total consumer loans remained favorable in 2022, auto loan delinquencies worsened. Both the early-stage past-due rate and noncurrent rate for auto loans rose in first quarter 2023 to above their pre-pandemic levels. Net charge-offs for auto loans rose to their pre-pandemic level, even as high vehicle prices may have lessened losses from charged-off loans.

The trends in consumer loan performance could deteriorate in 2023 if the labor market or economic conditions soften. The concerning asset quality trends in auto loans may worsen if auto prices normalize.

CHART 23
Early-Stage Past-Due Rates Are Rising, Especially for Auto Loans



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

Energy

- Energy prices softened during second half 2022 as oil prices receded from earlier highs and were more stable through early 2023.
- Despite the decline in prices, the energy industry remained profitable, supporting employment in energy-concentrated states.⁴⁴
- Bank loan exposure to oil and gas firms continued to decline in 2022 from 2021 levels.
- Community bank asset quality in energy-concentrated states continued to improve through first quarter 2023.
- Despite strength in 2022, the outlook for conditions in the energy sector weakened by year-end and remained uncertain in early 2023.

Oil markets were volatile in 2022, and oil prices rose on average before moderating in the second half of the year through early 2023. In 2022, daily West Texas Intermediate (WTI) oil prices were at their most volatile since 2014.⁴⁵ The volatility reflected a sharp increase in prices early in 2022, followed by a sharp correction through the end of the year (Chart 24). Oil prices averaged almost \$95 per barrel in 2022, more than 39 percent higher than the year before, but averaged around \$76 in January through May 2023. An observable sharp upward movement in WTI oil prices during the first half of 2022 can be attributable to disruptions in energy supplies caused by geopolitical tensions in Ukraine that began in late February 2022. Sanctions imposed by sovereigns on Russia and other independent corporate actions taken in response to Russia's invasion of Ukraine also contributed to increased supply risks and higher oil prices. However, in the second half of the year, oil prices eased. According to the Energy Information Administration, crude oil prices were generally decreasing due to growing concerns around weakening global economic conditions. Uncertainties over the duration of China's pandemic-related lockdowns in 2022 added to those concerns, and rapid withdrawals from the Strategic Petroleum Reserve helped relieve supply challenges and contributed to softening oil prices.

In March and April 2023, Russia and several OPEC+ members announced oil production cuts of 1.7 million barrels per day (bpd) in addition to the 2 million bpd of cuts announced in October 2022. Overall, the cuts would take about 3 percent of the world's petroleum production off the market beginning in May through the end of 2023. The decision to cut oil production could result in significantly higher oil prices.

Despite the decline in oil prices, the industry remained profitable and employment growth in energy-concentrated states continued to outpace that of non-energy states. Strong demand sustained energy prices above breakeven rates for most companies. Economic conditions in energy-concentrated states are highly sensitive to changes in energy-related jobs. In 2022, energy-concentrated states had more than eight times the concentration of mining and logging employment than the rest of the nation. For the year ending first quarter 2023, nonfarm employment in energy states grew a combined 3.7 percent, a full percentage point faster than the 2.7 percent increase in employment growth for non-energy states. Better performance for energy states during this period was due in part to job growth in the mining and logging sector. Aggregate mining and logging employment in energy states grew more than twice as fast (9.8 percent) as that of non-energy states (4.2 percent).⁴⁶ Energy states continued to receive a boost from higher energy prices, which stimulate

⁴⁴ For this analysis, energy-concentrated states are Alaska, Colorado, Louisiana, New Mexico, North Dakota, Oklahoma, Texas, and Wyoming. Together, these states accounted for 78 percent of U.S. oil production and 66 percent of natural gas in December 2021.

⁴⁵ Standard deviation was used to calculate oil price volatility, based on author's calculations using Energy Information Administration/Thompson Reuters oil price data.

⁴⁶ Mining and logging employment numbers for Delaware and Hawaii were omitted from the non-energy total because they were aggregated along with their construction employment numbers. Cross-referencing with detailed Quarterly Census of Employment and Wages jobs data from the Bureau of Labor Statistics indicates very little energy employment in those two states, however.

CHART 24

Geopolitical Concerns Caused Oil Prices to Rise Sharply in the First Half of 2022 Before Falling in the Second Half Due to Recession Fears



domestic energy production and demand for energy-related employment. Energy segments that benefited from higher prices were liquefied natural gas, refining, and renewable energy.

Bank lending to the oil and gas industry declined in 2022, continuing a trend since the start of the pandemic; however, current exposure to the industry exhibits relatively modest credit risk, given strength in the oil and gas industry during the year.

Results of the 2022 Shared National Credit (SNC) review indicate that loan commitments to the oil and gas sector declined almost 16 percent from year-end 2019 through 2022, with most of the decline occurring in 2021.⁴⁷ As global demand for oil plummeted in 2020, the share of oil and gas loans in the SNC program that were rated special mention or adversely classified reached 23.3 percent.⁴⁸ Banks responded to weaker conditions in the energy industry by reducing credit allocations and, in some cases, by exiting entirely due to asset quality and environmental, social, and governance-related concerns.

After the decline in 2020, oil demand began to strengthen in 2021 and 2022 as industry profits jumped and oil and gas firms reduced debt. Among 11 industry sectors represented in the S&P 500, the S&P Energy Index's performance ranked first in 2021 and 2022. In 2022, losses exceeded 18 percent across the S&P 500, but the Energy Index gained almost 66 percent. Other than a small gain in the utility sector, energy was the only sector to record a gain over the year. The sector's strong equity performance was the result of higher prices combined with a collective focus on selectively funding new projects and returning excess cash flow to shareholders. Consistent with improved industry conditions, the share of oil and gas loans in the SNC program that received special mention and adverse classifications declined sharply to 3.9 percent. A continuing trend of declining oil prices during the first five months of 2023 compressed the favorable gap between oil prices and breakeven rates, which could moderate the strength in the oil and gas industry in early 2023.

⁴⁷ 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 found at <https://www.occ.treas.gov/publications-and-resources/publications/shared-national-credit-report/index-shared-national-credit-report.html>.

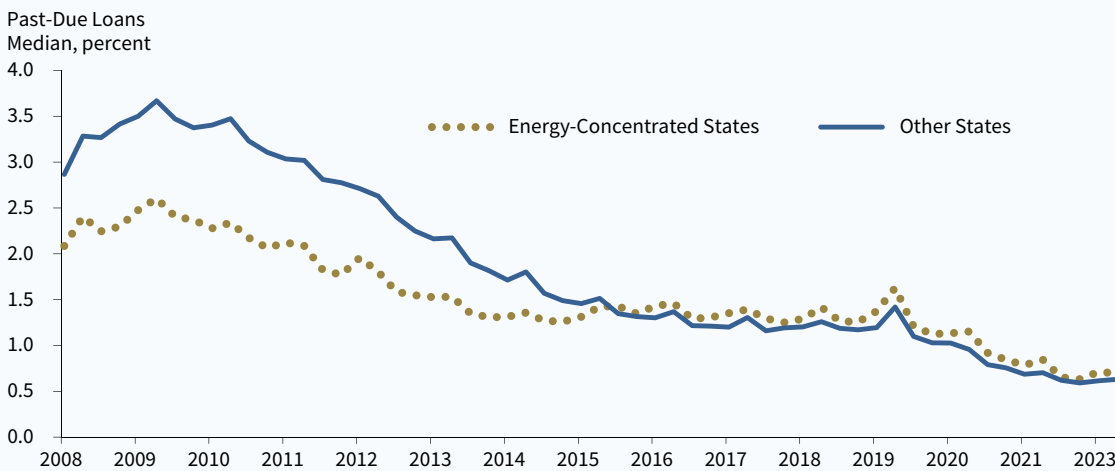
⁴⁸ According to the Energy Information Administration, global oil consumption declined 9.3 percent in 2020, far more than any period on record since 1974.

Asset quality of community banks in energy-concentrated states continued to improve, reflecting stronger conditions in the sector. While community banks generally do not lend directly to the energy sector, these banks are often active lenders and providers of banking services in energy-concentrated areas. Asset quality improvement in community banks in energy-concentrated states was similar to that of community banks in other states. The total past-due loan rate for community banks headquartered in energy-concentrated states was 0.70 percent in first quarter 2023, excluding government-guaranteed Paycheck Protection Program loans, down from 0.84 percent one year earlier and only slightly higher than the 0.63 percent for community banks not headquartered in energy-concentrated states (Chart 25). The total past-due rate for commercial and industrial loans for community banks in energy-concentrated states improved modestly in first quarter 2023 from a year earlier and was near its historical low since data collection began in 1984. Still, the past-due rate remained more than double the near-historic low rate of community banks in other states.

Despite strength in 2022, the outlook for the energy industry weakened through early 2023. Softening macroeconomic conditions, geopolitical events, and the potential for future supply disruptions will make it challenging to sustain the 2022 favorable trends in the energy sector. Several elements of uncertainty suggest oil market volatility could continue in 2023, including weak or recessionary prospects for the domestic and global economy, potential changes in Russian oil production, and the redistribution effects of oil and gas supply lines amid sanctions and oil import bans. According to the June 2023 Energy Information Administration Short-Term Energy Outlook, prices are forecast to soften further but are expected to remain above \$70 per barrel by fourth quarter 2023.⁴⁹ Additional pressure on supply side fundamentals is also evident with the moves by OPEC+ to reduce production to stabilize global markets.⁵⁰ These factors should help support economic and banking conditions in states reliant upon employment in the energy sector.

CHART 25

Despite Extreme Oil Price Volatility, Community Bank Past-Due Loans Have Remained Low and Stable in Energy-Concentrated States



Source: FDIC.
 Note: Includes all community banks as defined by the December 2012 *FDIC Community Banking Study*. Past-due loans exclude Paycheck Protection Program loans. Energy-concentrated states are Alaska, Colorado, Louisiana, New Mexico, North Dakota, Oklahoma, Texas, and Wyoming. Data are quarterly through March 31, 2023.

⁴⁹ *Short Term Energy Outlook*, U.S. Energy Information Administration, June 2023, p 29.

⁵⁰ OPEC, “[33rd OPEC and Non-OPEC Ministerial Meeting](#),” press release, October 5, 2022.

Housing

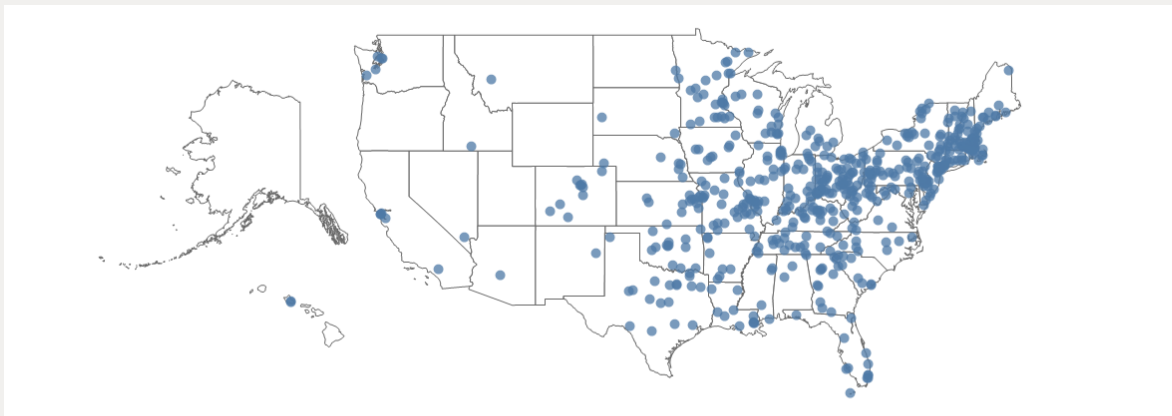
- The housing market continued to slow from pandemic highs as mortgage rates rose sharply from 2022 lows and remained elevated through first quarter 2023.
- With higher mortgage rates and uncertain economic conditions, the pace of home price appreciation slowed considerably from mid-2022 peaks through first quarter 2023. Home prices remain high, supported by a historically low supply of homes for sale.
- Mortgage originations fell as the housing market weakened, but banks reported higher residential loan balances early in 2023 and increased residential construction and development (C&D) lending.
- While residential mortgage loan asset quality and underwriting remained favorable through first quarter 2023, early signs of potential credit deterioration emerged.

Residential loans held by banks totaled \$2.78 trillion as of first quarter 2023.

- Of the \$2.78 trillion in residential loans, community banks hold 17 percent (\$474.6 billion).
- Almost 13 percent of all banks (604) hold a concentration of residential loans above 300 percent of capital (tier 1 capital and credit loss reserves for loans and leases).
- Slightly more than 40 percent of community banks (1,777) report that residential mortgage loans are the largest lending segment by dollar volume within their loan portfolio.
- Exposure to the residential market, in terms of total residential loans to total loans, is highest in the Northeast.

Regional Exposure to Residential Lending

Dots on the map represent the 604 banks (12.9 percent of all banks) with total 1–4 residential loans above 300 percent of capital.



Source: FDIC.

Sharply higher mortgage rates in 2022 contributed to a slowdown in the housing market later in the year that continued into first quarter 2023. After declining to historically low levels, the average rate on a 30-year fixed-rate mortgage rose sharply in 2022. Between January and October 2022, the weekly rate increased from 3.52 percent to 7.16 percent, the largest increase in one year since 1994. By March 2023,

the 30-year fixed-rate mortgage had eased to 6.40 percent but remained relatively high.⁵¹

As mortgage rates rose sharply in 2022, residential construction declined as home sales weakened and home price gains slowed nationwide. Real private residential fixed investment fell 10.6 percent in 2022, the largest annual decline since 2009.⁵² Residential

⁵¹ Mortgage Bankers Association.

⁵² Census Bureau and Bureau of Economic Analysis, annual permits and real private residential fixed investments data through 2022.

construction continued to decline in first quarter 2023. Sales of new and existing homes also began to decline in 2022, but new home sales listings edged up in first quarter 2023 as builders offered incentives, such as rate buy-downs, to attract potential buyers. Existing home sales continued to decline in first quarter 2023.

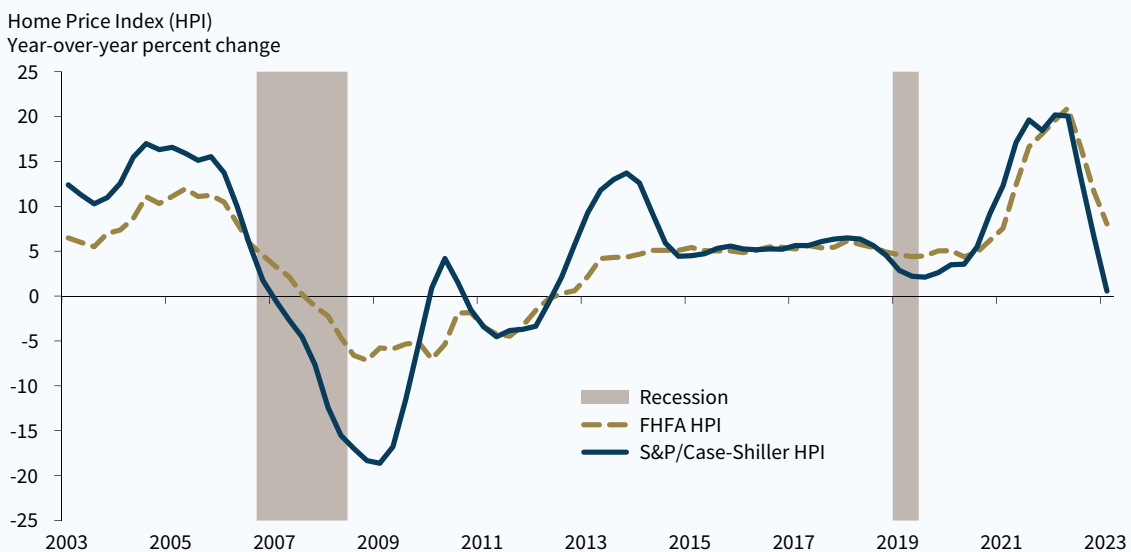
With higher mortgage rates and uncertain economic conditions, the pace of home price appreciation slowed considerably from mid-2022 through first quarter 2023. After increasing at double-digit rates from first quarter 2021 to fourth quarter 2022, home price growth slowed nationally to single-digits during first quarter 2023 (Chart 26).⁵³ During the pandemic when home prices increased rapidly across the country, metro areas including Boise and Phoenix experienced peak home price appreciation of more than 30 percent.⁵⁴ Appreciation rates have since slowed from recent highs, but prices remained well above pre-pandemic levels as of first quarter 2023. As of March 2023, home price growth had slowed the

most among more expensive markets in the West, such as Seattle and San Francisco, where remote work options led to out-migration, which pushed home prices noticeably below their peak. Since reaching peak levels, home prices have fallen faster than the nation in nine of the nation's 20 largest markets, according to S&P CoreLogic Case-Shiller.⁵⁵ In contrast, Tampa and Miami led the nation in home price gains from pre-pandemic levels through first quarter 2023 as in-migration into the Southeast supported home price appreciation in these markets where home prices remain near their recent highs.⁵⁶

Despite easing home price appreciation in the second half of 2022 through first quarter 2023, housing affordability remained well below pre-pandemic levels for the nation. The National Association of Realtor's Housing Affordability Index was 108.1 in first quarter 2023, much lower than its pre-pandemic level of 178.4 and below the historical average of 143.3.⁵⁷

CHART 26

U.S. Home Price Growth Slowed in Mid-2022 and Trended Lower Through First Quarter 2023



Sources: S&P Dow Jones Indices, Federal Housing Finance Agency, and National Bureau of Economic Research (Haver Analytics).
 Note: Data are quarterly seasonally adjusted figures through first quarter 2023.

⁵³ Federal Housing Finance Agency, quarterly home price data through first quarter 2023.

⁵⁴ S&P CoreLogic Case-Shiller, quarterly home price data through March 2023.

⁵⁵ S&P CoreLogic Case-Shiller, monthly home price data through March 2023.

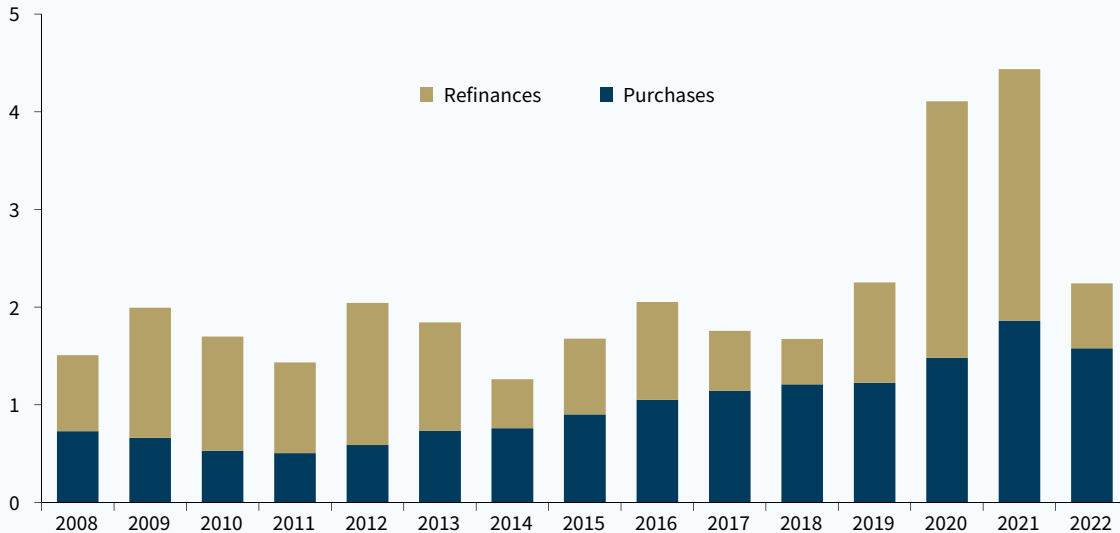
⁵⁶ Ibid.

⁵⁷ An affordability index above 100 signifies more than enough income to qualify for a mortgage loan on a median priced home with a down payment of 20 percent. An index above 100 is deemed to be affordable, while an index below 100 is deemed to be unaffordable.

CHART 27

Mortgage Origination Volumes Dropped Sharply in 2022 Following Elevated Levels the Prior Two Years

Total Mortgage Origination Volumes
\$ Billions



Source: Mortgage Bankers Association (Haver Analytics).
Note: Data are annual through 2022 for 1-4 unit family loans expressed in billions.

Housing prices remained high supported in part by a limited supply of homes for sale. Housing supply, which includes existing homes and new homes for sale, has been relatively tight following the decline in the construction of single-family homes after the large excess supply of new home construction during the housing cycle in the late-2000s.⁵⁸ Housing supply edged up in 2022 but remained lower than the pre-pandemic level through May 2023.⁵⁹ Existing homes for sale represent the largest share of single-family housing supply; however, the sharp rise in mortgage rates has hindered the inventory of existing homes. Anecdotal evidence suggests homeowners with low fixed-rate mortgages, which make up a large share of homeowners, have been reluctant to list their homes for sale.⁶⁰ The share of new homes for sale also declined since late 2021 through early 2023 after rising early in the pandemic.

Residential mortgage activity slowed in 2022 following rapid gains the previous two years. For the year ending 2022, mortgage origination volume across all types of mortgage lenders decreased 49 percent from a year earlier, according to the Mortgage Bankers Association.⁶¹ After spiking in 2020 and 2021, origination of new mortgages to purchase a home in 2022 returned closer to levels before the pandemic. Mortgages originated for refinancing declined in 2022, reaching a record low, as many existing homeowners had already locked into historically low fixed-rate mortgages (Chart 27). In first quarter 2023, mortgages to purchase a home decreased 30 percent year over year and approached the first quarter 2020 level, and refinancings continued to decline.

⁵⁸ Existing homes represent nearly 90 percent of homes for sale nationally. Existing homes for sale increased from a record low of 1.6 months in January 2022 to 2.9 months in December 2022 as demand softened due to higher mortgage rates and increased economic uncertainty.

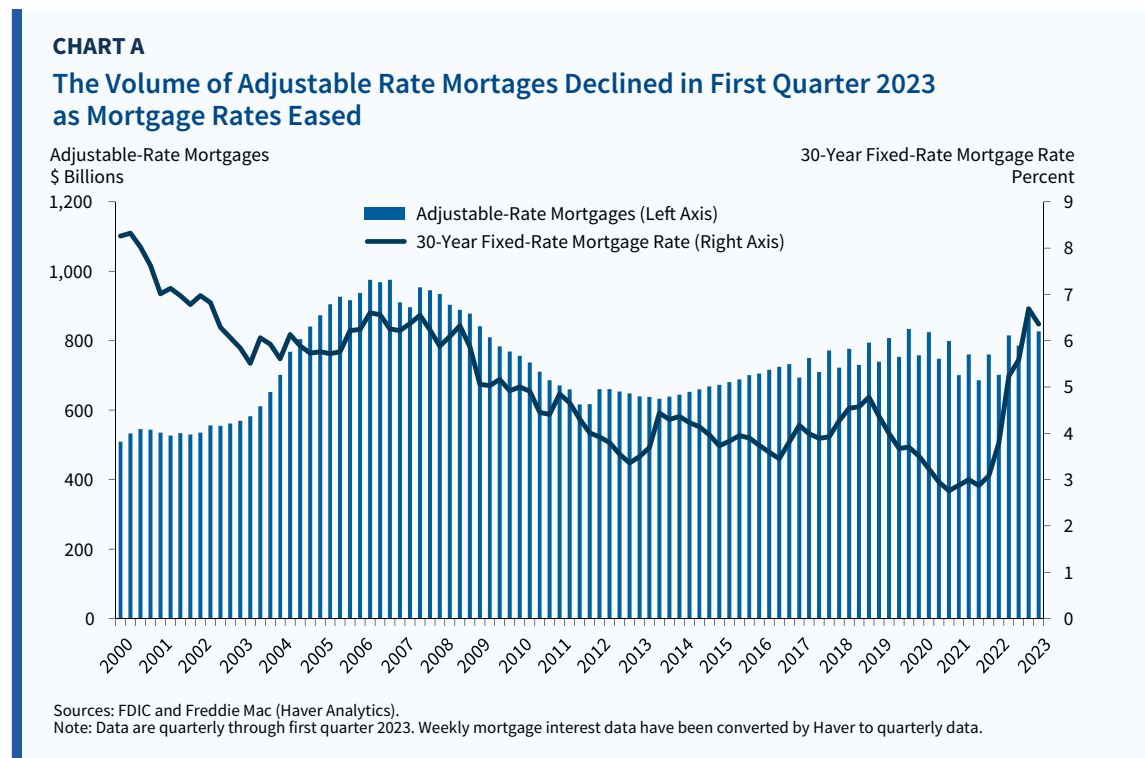
⁵⁹ National Association of Realtors.

⁶⁰ Lotfi Karoui, Vinay Viswanathan, and Ronnie Walker, "Inventory Is Tipping the Scales," Goldman Sachs, May 31, 2023.

⁶¹ Mortgage origination volume estimates include only single-family (1-4 unit), closed-end, first lien, home purchase or refinanced loans that were originated through the retail, consumer direct, broker wholesale, or non-delegated correspondent production channels. The estimates exclude subordinate liens, HELOCs and home equity loans, and purchased loans (i.e., loans originated through the delegated correspondent channel to avoid double counting loans).

Adjustable-Rate Mortgages (ARMs) Rose as Long-Term Mortgage Rates Increased

As fixed mortgage rates rose sharply during 2022, demand for ARMs increased. Aggregate bank holdings of ARMs rose from 28 percent of total residential mortgage loans to 33 percent during 2022. As long-term mortgage rates eased in early 2023, the ARM share at banks declined slightly in first quarter 2023 to 30 percent (Chart A). Banks headquartered in states that experienced the highest home price appreciation rates reported a larger share of ARMs to total residential loans during the period. For example, ARMs as a share of total residential loans were 58 percent for banks headquartered in California and 50 percent for banks headquartered in Florida, traditionally among the highest in the nation, and well above the national average. Despite the increase, the share of ARMs remained lower than in the early 2000s housing cycle, and industry studies indicate that underwriting is stronger for ARMs in this cycle.



Although residential mortgage originations declined, the banking industry reported higher residential loan balances through first quarter 2023, including loans for residential C&D.⁶² Banks reported residential loans totaling \$2.78 trillion as of first quarter 2023, up 9.5 percent from one year earlier and the highest amount since 2008. These loans were the largest loan segment for nearly half of all

banks.⁶³ Both community banks and noncommunity banks reported an increase in residential loans from a year earlier. One-to-four family residential loans, which represent 90 percent of total residential mortgage loans, drove the increase; home equity loans accounted for most of the remainder. Balances of home equity lines of credit (HELOCs) increased 3.3

⁶² Federal Deposit Insurance Corporation, Call Reports. Total residential 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).

⁶³ Federal Deposit Insurance Corporation, Call Reports. Call Report data for total residential loans are in dollars.

percent in first quarter 2023 on an annual basis. Both noncommunity banks and community banks reported an increase in HELOCs.

Mortgage balances rose as banks may have retained them on their balance sheets rather than selling them. During first quarter 2023, residential mortgage loans sold declined nearly 24 percent from the previous quarter and 69 percent from a year earlier. In contrast, residential mortgage loans sold rose at a quarterly average of 3.1 percent before the pandemic.⁶⁴ During first quarter 2023, bank mortgage portfolios included long-term fixed rate mortgages originated when mortgages rates were lower, reducing their market value as interest rates rose. A greater share of longer-term fixed rate mortgages with lower yields could challenge net interest margins (see the Net Interest Margins and Interest Rate Risk Section of this report for more information).

A higher volume of total residential mortgage loans contributed to a rise in the ratio of residential mortgage loans to capital to 133 percent as of first quarter 2023, up from 122 percent one year earlier but below the pre-pandemic median of 138 percent in fourth quarter 2019. Nearly 13 percent of all banks reported total residential loans to capital above 300 percent, up moderately from last year but below the 17 percent peak reached in 2011.

Although construction of new homes has slowed, 1–4 family residential C&D loans reached \$105.4 billion in first quarter 2023, up 14 percent from a year earlier and the highest balance since third quarter 2009. Both community banks and noncommunity banks reported an increase in 1–4 family residential C&D loan balances last year. While funded amounts increased, the amount of unfunded C&D commitments declined by 6 percent to \$95 billion in first quarter 2023 but remained higher than the pre-pandemic level. Nearly 97 percent of banks with high C&D concentrations are community banks, consistent with the long-term trend.⁶⁵

While residential mortgage loan asset quality remained favorable through first quarter 2023, early signs of potential credit deterioration emerged.

After peaking in fourth quarter 2020 following the onset of the pandemic, asset quality measures for residential mortgage loans remained favorable in first quarter 2023. The aggregate total residential mortgage loan past-due rate declined to 1.93 percent in first quarter 2023 from 2.40 percent one year earlier, and the noncurrent rate declined to 1.35 percent. These measures remained below the pre-pandemic levels and well below peak rates following the housing downturn a decade ago. However, the early-stage past-due rate on residential mortgage loans ticked up to 0.58 percent in first quarter 2023, slightly higher than a year earlier (Chart 28).⁶⁶

The total past-due rate on 1–4 family residential C&D loans rose to 0.69 percent in first quarter 2023, up from one year earlier and the previous quarter but below the pre-pandemic level of 0.97 percent in fourth quarter 2019. Similar to trends for residential mortgage loans, the early-stage past-due rate on 1–4 family residential C&D loans rose to 0.50 percent in first quarter 2023 from 0.38 percent the previous quarter but remained lower than the pre-pandemic level. The noncurrent rate on 1–4 family residential C&D loans also remained low at well below 1 percent. While overall residential mortgage loan asset quality measures remained low by historical standards as of first quarter 2023, slight increases in past-due rates on residential mortgage loans and residential C&D loans could indicate potential weakness among some mortgage borrowers.

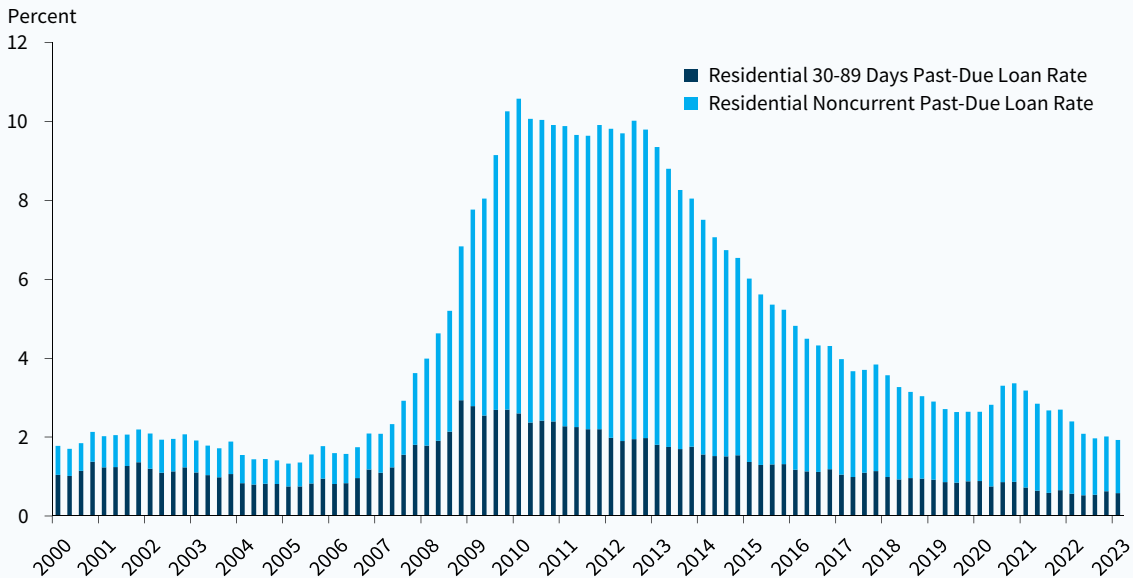
⁶⁴In this reference, the pre-pandemic period refers to first quarter 2015 through fourth quarter 2019.

⁶⁵High concentration is defined as banks with 1–4 residential C&D loans greater than 50 percent of capital.

⁶⁶Federal Deposit Insurance Corporation, Call Reports. Noncurrent 1–4 family residential loans are those secured by 1–4 residential properties 90 days or more past due and in nonaccrual status. Excluding Government National Mortgage Association (GNMA) noncurrent balances, the noncurrent rate reported by the banking industry declined from 1.35 percent to 0.93 percent. Thirty-four percent of the decline in 1–4 residential noncurrent loans was due to lower rebooked GNMA noncurrent balances, which fell 21 percent from the year-earlier level.

CHART 28

Residential Mortgage Asset Quality Remained Favorable in 2023, but the Early-Stage Delinquency Rate Moved Slightly Higher Over the Previous Year



Source: FDIC.
Note: Data are quarterly through first quarter 2023.

Bank residential mortgage lenders may face increased headwinds in 2023 if housing market conditions deteriorate further, but low delinquency rates and relatively sound underwriting are likely to help those lenders. Forecasts for home price trends vary; some forecasts indicate that home prices may decline in 2023 or continue to appreciate at a slower pace than in 2022.⁶⁷ The housing outlook remains challenged by economic uncertainty with a prospect of a recession, high inflation and interest rates, supply constraints, and sharp changes in net in-migration patterns. Even with weaker housing activity, many industry forecasts suggest that home prices nationally will remain above their pre-pandemic level in the absence of a severe recession.

Despite early signs of deterioration, the total past-due rate on residential mortgages reported by the banking industry remained favorable in first quarter

2023, and industry reports suggest that residential mortgage underwriting remained relatively sound. According to an April 2023 Federal Reserve survey, in response to weakening conditions, a growing share of bank respondents tightened underwriting standards on residential real estate loans in first quarter 2023.⁶⁸ A larger share of current residential mortgages outstanding is to borrowers with high credit scores, nearly 61 percent, almost double the share reported during the Great Recession.⁶⁹ However, banks with less diversified business models that have relied heavily on residential mortgage activity may face increased risk should the decline in the housing market and mortgage originations that occurred last year become more severe.

⁶⁷ CoreLogic Case-Shiller, Federal Housing Finance Agency, and S&P Dow Jones (Moody's Analytics) annual home price forecast data through 2023 ; Goldman Sachs, "Why The Global Housing Market Has Further to Slide," March 22, 2023; CoreLogic, "U.S. Home Price Insights – May 2023," May 2, 2023; Zillow, "Zillow Home Value and Sales Forecast: June 2023," June 12, 2023.

⁶⁸ Board of Governors of the Federal Reserve System, [Senior Loan Officer Opinion Survey on Bank Lending Practices](#), April 2023.

⁶⁹ New York Fed Consumer Credit Panel/Equifax. As of first quarter 2023, 60.7 percent of all mortgages were originated to borrowers with a credit score of 760 or higher, compared with 30.7 percent reported in first quarter 2008.

Leveraged Lending and Corporate Debt

- Corporate borrowers continue to face challenges of high inflation, rising interest rates, and an economic slowdown.
- Corporate bond and leveraged loan markets have experienced stress; prices and issuance declined, while spreads have increased through early 2023.
- Defaults and distress ratios rose through early 2023 but remained low relative to past stress periods.
- Banks remained exposed to corporate debt through both direct credit risk exposure and investment banking activities, and indirectly through changes in macroeconomic conditions.

Corporate borrowing conditions deteriorated in 2022 and through first quarter 2023 amid rising interest rates, high inflation, and growing expectations of a possible recession. U.S. price inflation rose to the highest level in decades in late 2021 and into 2022, prompting the Federal Reserve to rapidly increase interest rates, which pushed up interest rates for corporate borrowers.⁷⁰ Spreads on corporate debt widened amid concerns about the adverse effects of inflation and the outlook for an economic recession, further pushing up borrowing costs.⁷¹ While spreads moved markedly higher from 2021 levels in 2022 and at the start of 2023, they remained well below levels reached during the crisis periods of the early months of the pandemic and the Great Recession. Leveraged loan distress ratios and default rates also rose from the low levels in 2021 but likewise remained well below previous crisis periods through early 2023 (Chart 29).⁷² Bank business lending conditions tightened beginning in the second half of 2022 and through first quarter 2023, with net lending standards tightening significantly for both commercial and industrial (C&I) and commercial real estate (CRE) loans.⁷³ Secondary market loan prices declined and market price volatility increased in 2022. Price declines were more pronounced for lower-rated borrowers. Loan prices stabilized in early 2023 but remained below 2021 levels.⁷⁴

Corporate debt issuance slowed sharply, especially for lower-rated and more highly leveraged borrowers. Corporate bond issuance declined as well, with investment grade issuance falling nearly 15 percent and high-yield issuance falling almost 80 percent to its lowest level since 2008.⁷⁵ Despite lower debt security issuance, growth in corporate loans was robust, leading to an increase in total corporate debt in 2022. However, the increase was slower relative to growth in GDP and corporate profits through the end of 2022, reducing the corporate debt-to-GDP ratio to below 2020 and 2021 levels and the corporate debt-to-profits ratio to the lowest point since 2015 (Chart 30).⁷⁶ Total issuance in the leveraged loan market, a subset of the corporate debt market, sharply declined in 2022 and into first quarter 2023 to pre-pandemic levels, normalizing from the record issuance in 2021 (Chart 31). Leveraged loan issuance fell by nearly half in 2022, driven by a sharp decline in institutional leveraged loans, which are generally sold to insurers, pension funds, collateralized loan obligations (CLOs), and other types of investors. Merger and acquisition activity, which typically drives growth for leveraged loans, peaked in 2021 but was depressed in 2022 and first quarter 2023, reducing institutional leveraged loan issuance to a 12-year low.⁷⁷

⁷⁰ Bureau of Labor Statistics and the Board of Governors of the Federal Reserve System.

⁷¹ ICE BofA High Yield Index option-adjusted spread and ICE BofA U.S. Corporate Index option-adjusted spread.

⁷² PitchBook Leveraged Commentary & Data (LCD).

⁷³ Board of Governors of the Federal Reserve System, Senior Loan Officer Opinion Survey on Bank Lending Practices.

⁷⁴ PitchBook LCD.

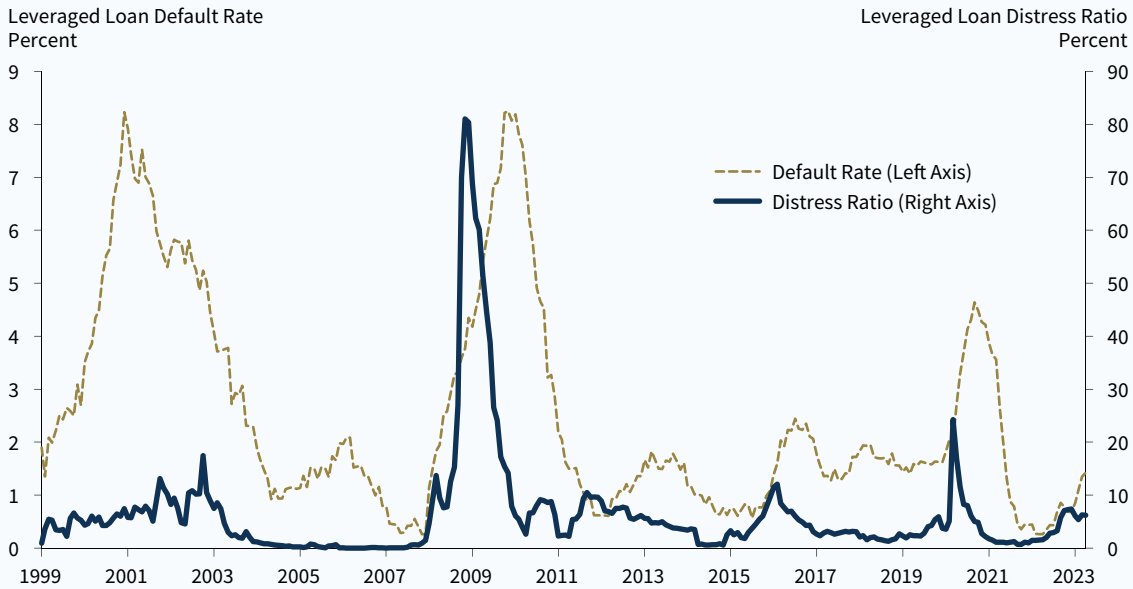
⁷⁵ Ibid.

⁷⁶ Board of Governors of the Federal Reserve System, Financial Accounts of the United States; Bureau of Economic Analysis.

⁷⁷ PitchBook LCD.

CHART 29

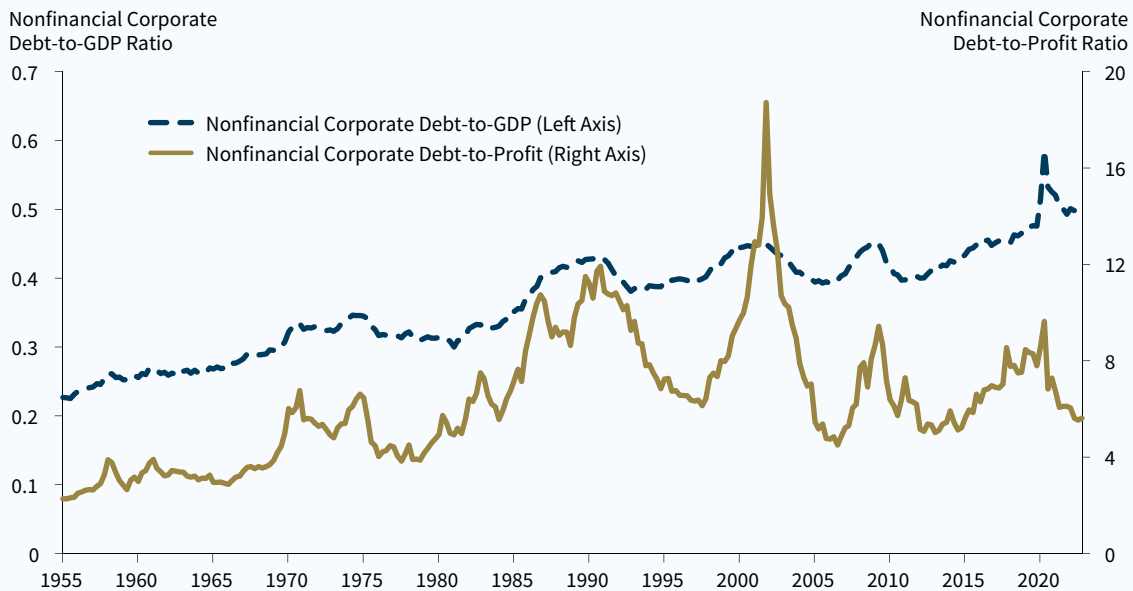
Leveraged Loan Distress and Default Rates Rose in 2022 and Early 2023 but Remain Below the Levels Reached in Past Stress Periods



Source: PitchBook Leveraged Commentary & Data.
 Note: Default rate is lagging 12-month rates. Distress ratio is the share of loans priced below 80 (par is 100). Monthly data through April 2023.

CHART 30

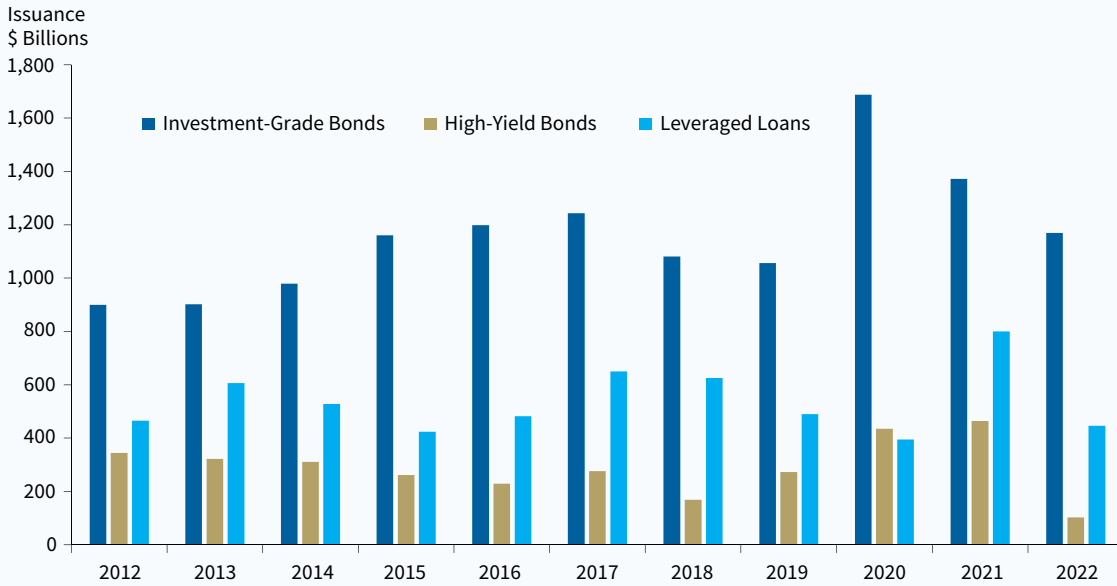
Corporate Debt Relative to GDP and Corporate Profits Moderated in 2022 Relative to 2020 and 2021 Levels



Sources: Federal Reserve Board and Bureau of Economic Analysis (Haver Analytics).
 Note: Nonfinancial corporate debt includes loan and debt security liabilities. Nonfinancial corporate profit is quarterly before tax and includes inventory valuation adjustment at a seasonally adjusted annual rate. Quarterly data through fourth quarter 2022.

CHART 31

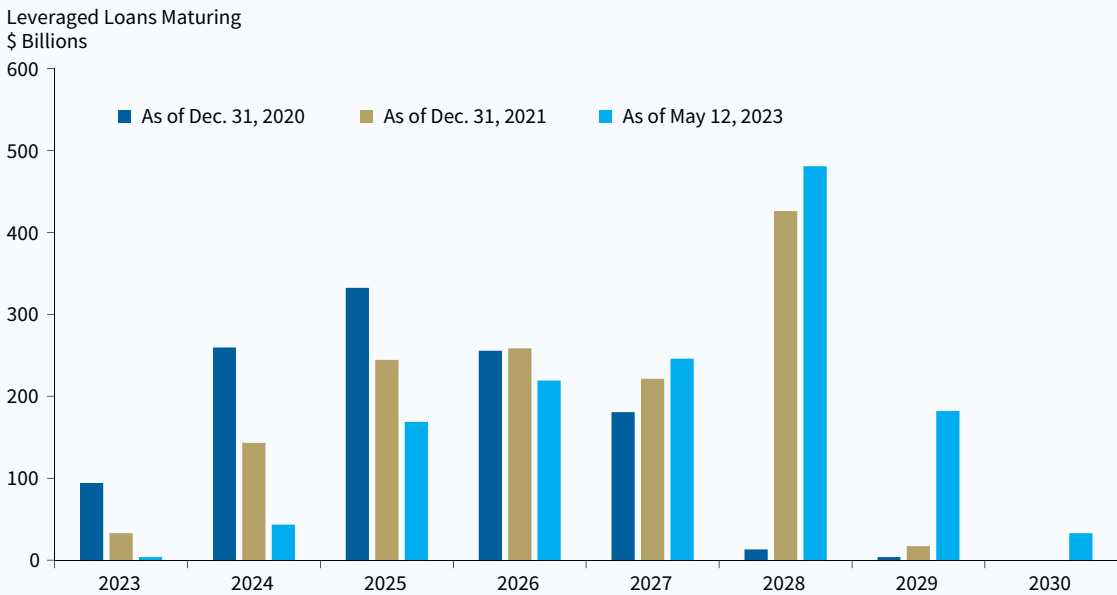
High-Yield Corporate Bond Issuance Fell to Decade Low, While Leveraged Loan and Investment-Grade Bond Issuance Moderated



Source: PitchBook Leveraged Commentary & Data.
Note: Annual data from 2012 through 2022.

CHART 32

Leveraged Loan Borrowers Extended Maturities Into the Late 2020s, Reducing Near-Term Refinancing Risks



Source: PitchBook Leveraged Commentary & Data.
Note: Based on yearly data through May 2023.

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

The banking industry has direct exposure to risks in corporate debt through holdings of debt securities, bilateral loans, participation in syndicated loans, and lending to originators of private credit transactions. The highest risk segment of corporate debt is typically loans to companies with higher debt levels called leveraged loans. Leveraged loans are typically floating rate, 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.⁷⁸ Bank holdings of syndicated loans, which include leveraged loans, rose to more than \$1.36 trillion in fourth quarter 2022, up more than 20 percent from year-end 2021.⁷⁹ In addition, bank holdings of CLOs, which contain leveraged loans, increased to at least \$174 billion in first quarter 2023, up 13 percent from the end of 2021. CLO holdings are concentrated in the largest banks, with the top four banks by assets accounting for 72 percent of estimated bank-held CLOs and the top 20 banks by CLO holdings accounting for 97 percent of total CLO holdings.⁸⁰ While banks typically hold the higher-rated parts of CLOs, they 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. 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 typically concentrated in larger banks, the banking industry faces indirect exposures through the effects

of corporate debt distress on economic conditions. Significant corporate debt distress could exacerbate an economic downturn by forcing firms to pull back on investment and lay off employees. This reduction in employment and business activity could lead to increased delinquencies and defaults for bank C&I, CRE, and other loans.

Slowing economic growth and continued high interest rates could weigh on corporate debt markets and pose credit risk for the banking industry, while limited near-term corporate debt maturities should mitigate some risks.

Corporations extended their debt maturities between 2020 and 2022, taking advantage of lower interest rates in the early part of the pandemic and thereby limiting refinancing needs in 2023 and 2024, which could help to mitigate default risk in the near term (Chart 32).⁸¹ However, an uncertain economic outlook, including the possibility of a recession, could lead to lower corporate profitability, which could adversely affect repayment and increase refinancing risks across some issuers, particularly those in adversely affected industries.⁸² In addition, borrowing costs could continue to rise further through 2023 if benchmark interest rates, such as Treasuries, continue to rise or if the market perceives higher credit risk in the corporate debt market, which could translate into increased spreads on corporate debt relative to Treasury rates.⁸³ These factors could constrain the ability of corporations to service their debt.⁸⁴ Rising corporate defaults would affect holders of corporate debt securities, including banks. Analysts expect corporate defaults to increase through 2023 but remain at or below long-term averages before increasing further in 2024, in line with past default cycles.⁸⁵ Corporations facing financing constraints could pull back on employment and investment, propagating their distress into other parts of the economy.

⁷⁸ 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](#).

⁷⁹ Board of Governors of the Federal Reserve System, *Financial Accounts of the United States—Enhanced Financial Accounts*.

⁸⁰ Federal Deposit Insurance Corporation, Call Reports. CLO data are reported only by banks with at least \$10 billion in assets, so these numbers do not include any holdings by banks below that threshold.

⁸¹ PitchBook LCD.

⁸² S&P Global, “U.S. Weekly Economic Commentary: 2023 Recession;” The Conference Board, “December Economic Update 2022.”

⁸³ Board of Governors of the Federal Reserve System, “[Summary of Economic Projections](#),” December 14, 2022.

⁸⁴ Deutsche Bank, “Default Study—2023: Return of the Boom-Bust Cycle,” May 31, 2023.

⁸⁵ S&P Global Ratings, “Credit Conditions North America Q2 2023,” March 28, 2023; Deutsche Bank, “Return of the Boom-Bust Cycle.”

Nonbank Financial Institution Lending

- As the nonbank financial sector has continued to expand, so has lending by banks to nonbank financial institutions (NBFIs).
- Loans to NBFIs remained concentrated among the largest banks, and funded balances continued to rise through first quarter 2023.
- Community bank exposure to NBFIs remained small, and outstanding loans to these institutions contracted through first quarter 2023.
- While credit quality measures on NBFIs loans remained favorable, bank exposure to risks of nonbank business activities has increased.

The banking industry continued to increase lending to nonbanks through first quarter 2023.

The nonbank financial sector continued to expand, with direct bank lending to NBFIs growing in tandem. Banks held \$761 billion in funded loan commitments to NBFIs in first quarter 2023, a record high.⁸⁶ During first quarter 2023, a quarter of relatively tepid overall total loan growth in the banking industry, the year-over-year growth rate in NBFIs lending continued to outpace growth rates in all other major loan portfolios (Chart 33).

Banks lend to many different types of NBFIs, including investment firms, financial vehicles, nonbank real estate lenders, insurers, transaction processors, and other entities. Banks provide credit-line commitments to these firms, and NBFIs rely on these lines as a key source of liquidity for day-to-day operations and for funds to lend or to invest.

Loans to NBFIs are concentrated among global systemically important banks (GSIBs) and represented a considerable share of GSIB capital in first quarter 2023. GSIBs represent more than 60 percent of loans to NBFIs at insured institutions. GSIBs reported 9.2 percent growth in funded NBFIs balances year over year in first quarter 2023.⁸⁷ Funded NBFIs loan concentrations at GSIBs reached 50.9 percent of capital in first quarter 2023, up from 39.5 percent at year-end 2019 (Chart 34).⁸⁸ 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 has declined through first quarter 2023. Only 8.8 percent of community banks had funded commitments to nonbanks, and their loan commitments to NBFIs declined 18.6 percent from year-end 2021. These loans account for a small portion—0.95 percent—of total community bank lending. Supervisory observations suggest that most lending to NBFIs by community banks is through warehouse lines of credit to nonbank mortgage companies. As mortgage origination declined amid rising interest rates, many nonbank mortgage companies reduced their credit-line usage at banks.

The nonbank mortgage industry was challenged by a decline in housing activity that occurred in late 2022 as mortgage rates rose. Nonbank mortgage companies could come under further pressure in a potential recession and sustained high interest rate environment. Some nonbank mortgage lenders loosened underwriting standards and offered new products to maintain origination volume while maintaining limited loss-absorbing capacity. Nonbank mortgage servicers could face acute liquidity pressures in the event of widespread delinquencies as some servicers have to repurchase distressed mortgages while maintaining investor payments.⁸⁹

⁸⁶ Loans to nonbank financial institutions were first reported on Call Reports in first quarter 2010.

⁸⁷ 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.

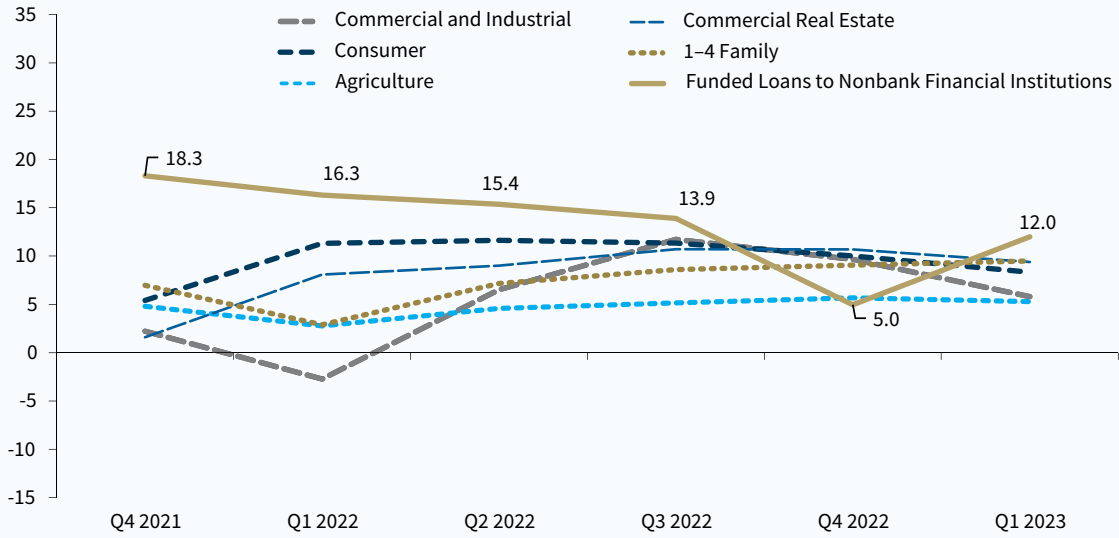
⁸⁸ Capital is defined as tier 1 capital and credit loss reserves for loans and leases.

⁸⁹ Financial Stability Oversight Council, 2022 Annual Report.

CHART 33

Growth in Nonbank Financial Institution Lending Outpaced Other Major Loan Categories

Annual Loan Growth Rate
Percent

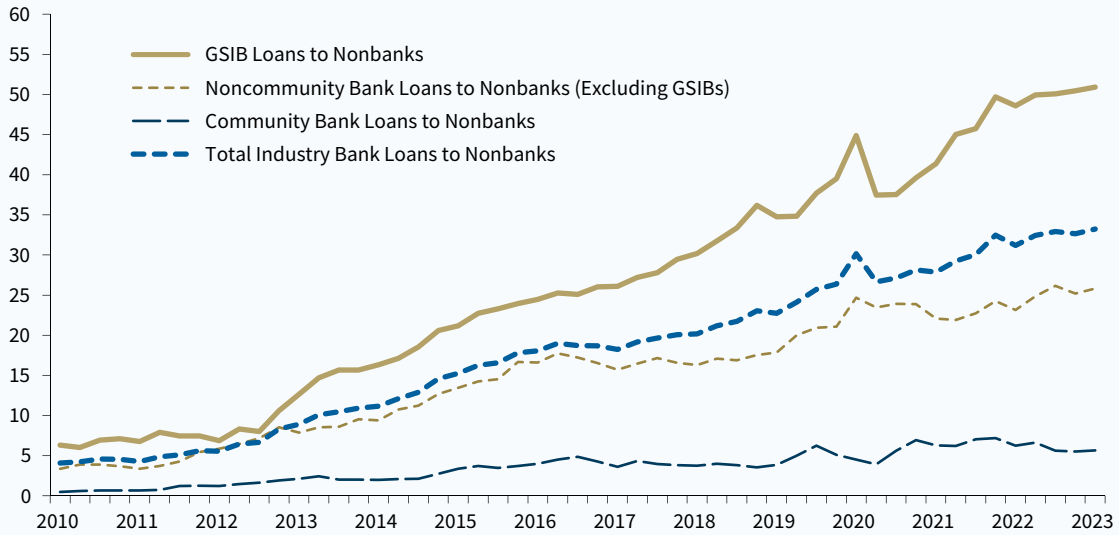


Source: FDIC.

CHART 34

GSIBs Have the Highest Concentration of Loans to Nonbank Financial Institutions

Funded Nonbank Financial Institution Loans to Tier 1 Capital Plus Credit Loss Reserves for Loans and Leases
Percent



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

Despite current favorable credit risk metrics, bank exposures to nonbanks pose potential future risks.

While asset quality measures remained favorable on bank loans to NBFIs through first quarter 2023, some NBFIs do not have access to stable funding sources, making them vulnerable to credit distress during periods of market disruptions and economic weakness. In exchange for higher yield, some NBFIs that extend credit may assume higher credit and liquidity risks than those typically borne by banks. Bank lending to riskier NBFIs can thus indirectly transmit increased credit and liquidity risks to their own balance sheets. Similarly, some research has found that compared with banks, NBFIs serve riskier borrowers and limit lending more during financial shocks.⁹⁰ For example, some research suggests that NBF loan origination during the Great Recession declined 96 percent compared with 26 percent for banks. During the pandemic, NBF loan originations declined 85 percent, while bank lending increased.⁹¹ NBFIs could experience defaults from their borrowers or losses due to weakened investments, which would affect their ability to repay debt.

In addition to higher delinquencies or defaults, a drawdown by NBFIs on credit lines in a time of stress could translate into liquidity pressures at banks that extend credit to NBFIs. At the onset of the pandemic in early 2020, NBFIs drew down their lines at banks amid increased economic uncertainty. In first quarter 2020, funded NBF loan surged \$86.1 billion (17.6 percent) from the prior quarter, while unfunded commitments to these institutions shrank \$44.0 billion (10.3 percent). The utilization rate on NBF lines of credit, defined as total funded commitments to NBFIs provided by banks as a percentage of total funded and unfunded commitments, increased to 60 percent, up from 53 percent in fourth quarter 2019 before the start of the pandemic.⁹² While the utilization rate on credit lines to NBFIs was approximately 54 percent in first quarter 2023, relatively unchanged from year-end 2022 and down from the 2020 high, the banking industry's loan exposure to nonbanks has increased since before the pandemic, both in terms of dollar amount and as a share of capital.

⁹⁰ Iñaki Aldasoro, Sebastian Doerr, and Haonan Zhou, "[Nonbank Lending During Crises](#)," Bank for International Settlements and Princeton University, June 2023.

⁹¹ Quirin Fleckenstein, Manasa Gopal, German Gutierrez Gallardo, and Sebastian Hillenbrand, "[Nonbank Lending and Credit Cyclicalities](#)," NYU Stern School of Business, June 2020.

⁹² The NBF utilization of lines of credit is defined as funded loans to NBFIs as a percent of total funded and unfunded commitments to bank and nonbank entities (RC-L.1.e.(2)).

Small Business Lending

- High inflation and labor market shortages challenged small businesses in 2022. Small business conditions varied across industries as consumer spending patterns shifted toward services.
- 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 through first quarter 2023, but uncertain small business conditions may be a source of credit risk.

Small businesses have faced higher inflation and labor market shortages since 2021 and experienced a shift in consumer spending patterns that benefited some businesses more than others.⁹³

The National Federation of Independent Business (NFIB) reported that labor market shortages and inflation remained a top concern for small businesses in May 2023. Twenty-five percent of owners reported inflation as their single most important business problem, up from 2021 levels but down from a peak of 37 percent in July 2022. About the same share of

respondents reported quality of labor a concern, and 44 percent of owners reported they had job openings that were hard to fill.⁹⁴

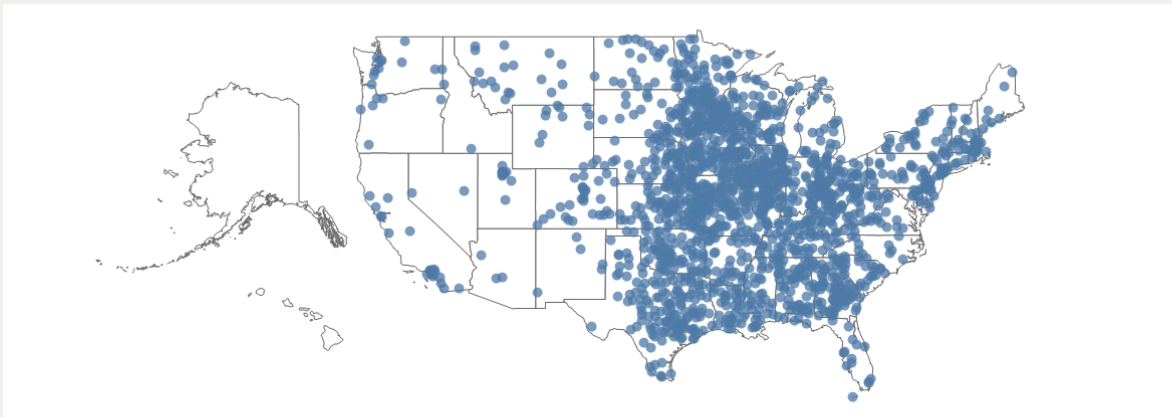
Recent trends in consumer spending may affect conditions for small businesses and the formation of new small businesses across industries. While real personal consumption expenditures (PCE) growth slowed from strong levels in 2021, it remained closer to pre-pandemic rates through first quarter 2023. After broad gains in consumer spending across industries

Small business lending is a key component of many bank lending portfolios nationwide.

Almost 40 percent of banks (1,865) have total small business loans greater than 75 percent of total commercial and industrial (C&I) loans as of December 31, 2022.* Small business loans are defined as C&I loans less than \$1 million.

Regional Exposure to Small Business Lending

Dots on the map represent the 1,865 banks (40 percent of all banks) with small business loans above 75 percent of total C&I loans at the end of fourth quarter 2022.



Source: FDIC.

Note: U.S. territories are not included in the map. Three banks in Guam and one bank in the Federated States of Micronesia with a concentration of small business loans are not shown.

* Small business loans data are reported only in second quarter and fourth quarter of the year.

⁹³ Despite overall growth in 2022, PCE growth was down considerably from 2021 and declined during the last two months of 2022. Weakness during the end of 2022 could signal future challenges for small businesses. See U. S. Bureau of Economic Analysis, [Table 2.3.6U](#), Real Personal Consumption Expenditures by Major Type of Product and Major Function, accessed January 31, 2023.

⁹⁴ NFIB Small Business Optimism Index, May 2023.

in 2021, consumer spending shifted from goods to services in 2022. Services spending was led by growth in recreation, transportation, and food services and accommodation, such as restaurants and take-out services. The decline in goods expenditures was led by reduced spending on motor vehicles and parts and food and beverages in 2022 that improved in first quarter 2023.⁹⁵ Consistent with the shift from goods to services consumption since 2021, new applications for small businesses rose for service-based businesses, such as accommodation and food services, and declined for retail trade and transportation and warehousing (Chart 35).⁹⁶

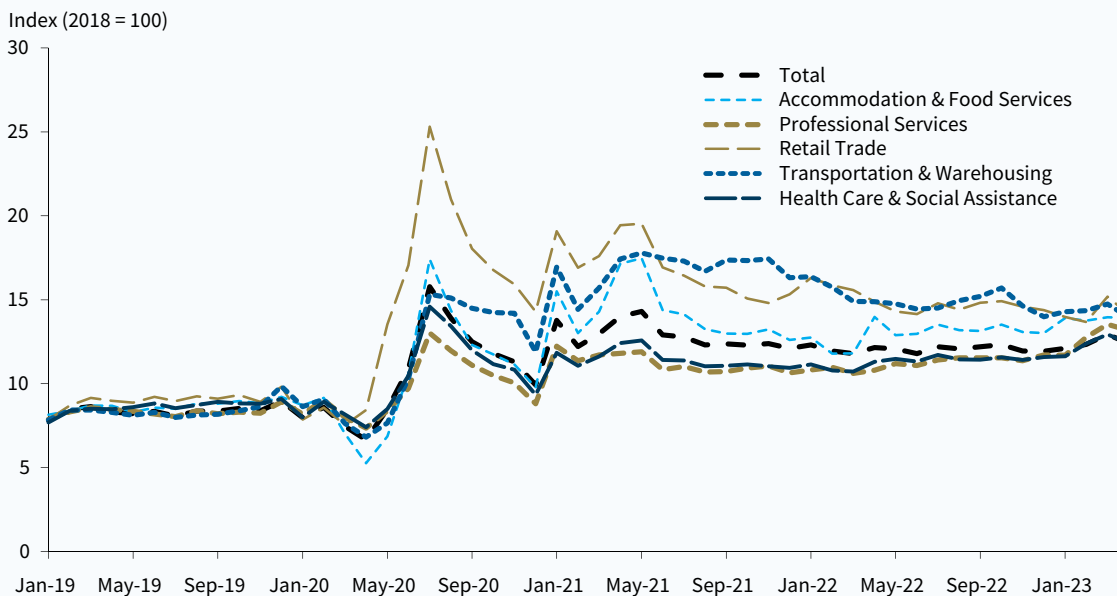
Banks reported a continued slowdown in small business lending in 2022, reflecting the winding down of Paycheck Protection Program (PPP) lending. Small business loans are defined as C&I loans less than \$1 million and are reported in Call Reports semiannually on June 30 and December 31. The banking industry’s small business lending portfolio also includes Small Business Administration lending.

After rising in 2020 primarily due to the introduction of the PPP program, small business lending declined for both community and noncommunity banks in 2022, reflecting in part the forgiveness and repayment of most PPP loans. The amount of small business loans outstanding normalized to the 2019 level by year-end 2022 (Chart 36).⁹⁷

Community banks remained an important source of small business lending. Community banks maintained an outsized share of the banking industry’s total small business loans in 2022 at 23.6 percent, despite holding only 14.7 percent of total industry loans. This share is significantly higher than the community bank share of total C&I loans, which was 9.5 percent at year-end 2022. Total small business loans at community banks declined by \$50.9 billion from 2020 through year-end 2022, reflecting in part the decline in PPP loans outstanding. While the amount of PPP loans held by community banks that meet the small business loan definition is not available,

CHART 35

Business Applications Have Increased for Certain Service Industries Since 2021



Source: Census Bureau (Haver Analytics).
Note: Monthly data through April 2023.

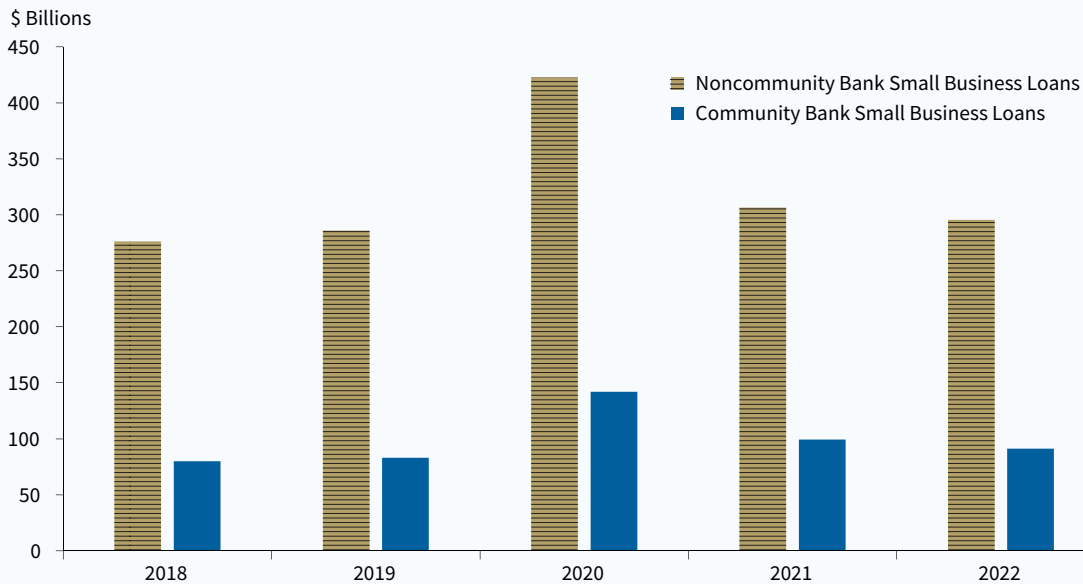
⁹⁵ The food and beverage category is solely for purchases for off-premise consumption.

⁹⁶ U.S. Census Bureau, “Business Formation Statistics Monthly Data Release,” press release, May 12, 2023.

⁹⁷ Banks report C&I loans less than \$1 million semiannually as of June 30 and December 31, and these measures do not include delinquency rates. Lines of credit, CRE loans, and other types of loans that may not be separately identified in Call Report data.

CHART 36

Small Business Loans Have Declined in Recent Years, Returning to Pre-Pandemic Levels



Source: FDIC.

Note: Annual data from 2018 to 2022. Small business loans include loans made under the Paycheck Protection Program.

by year-end 2022 only \$2.2 billion in total PPP loans was outstanding at community banks as the program ended, down from \$105.2 billion at year-end 2020.

While small business loans held by community banks declined in 2022, community banks continued to make business loans. Annual C&I loan growth, net of PPP loans, reported by community banks was 18.0 percent in fourth quarter 2022. C&I loan growth slowed in first quarter 2023 to 0.7 percent, reflecting bank concerns about economic uncertainties.

The community bank early-stage past-due and noncurrent rate on C&I loans remained relatively low through first quarter 2023. 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 early-stage past-due rate and the noncurrent rate reported by community banks declined at the onset of the pandemic and remained favorable through

first quarter 2023. Both rates were below levels reported by noncommunity banks. C&I asset quality of noncommunity banks also remained below the pre-pandemic averages as of first quarter 2023 (Chart 37).

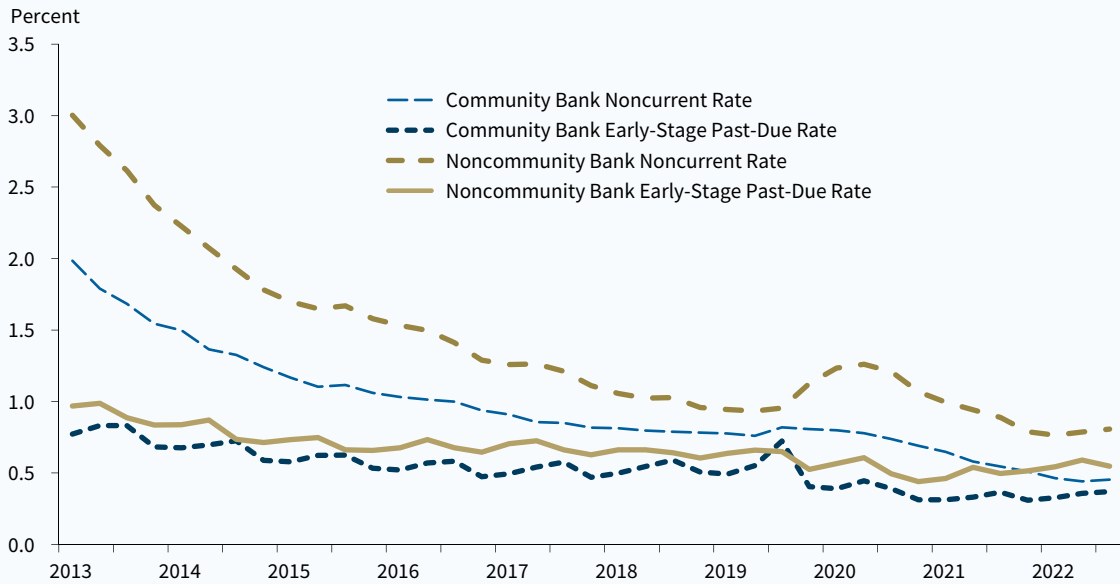
Small businesses reported weaker conditions in early 2023, which may be a source of credit risk for banks. Small business owners reported concerns about conditions in the near term. The May 2023 NFIB survey reported that the Optimism Index remained low at 89.4, down from 2021 levels.⁹⁸ Further, a net negative 50 percent of survey respondents said they believed that business conditions will improve over the next six months, according to the survey.⁹⁹ The last net positive survey response for this measure was in November 2020. Higher interest rates combined with weaker business conditions may make it more difficult for small business owners to meet their debt repayment requirements and may pressure asset quality of bank loans to small businesses in 2023.

⁹⁸ NFIB Small Business Optimism Index, May 2023.

⁹⁹ Net numbers reflect the difference between respondents who report a positive belief or position and those who report a negative belief or position, meaning negative numbers represent more negative than positive responses.

CHART 37

Community Bank Commercial and Industrial Loan Early-Stage Past-Due and Noncurrent Rates Are Lower Than Noncommunity Bank Rates



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