FEDERAL DEPOSIT INSURANCE CORPORATION

2019
Risk Review

FDIC

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Risk Review

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Contents

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Introduction

The FDIC has a long tradition of identifying, analyzing, and addressing key risks in the economy, financial markets, and the banking industry. With this publication—the 2019 Risk Review—the FDIC is expanding its coverage of risks that have the potential to affect stability and public confidence in the U.S. financial system. The publication serves the FDIC's mission by focusing on risks at a stage when policymakers, bankers, and the general public can act to mitigate their scope and impact. It also contributes to efforts to build trust and confidence through openness and accountability as part of the FDIC's *Trust through Transparency* initiative.[1]

The annual Risk Review provides a summary of key credit and market risks that ultimately may affect FDIC-insured institutions and the FDIC's Deposit Insurance Fund. Much of the discussion focuses on risks that may affect community banks. As the primary federal regulator for the majority of community banks in the United States, the FDIC is well-positioned to discuss risks that may affect the U.S. banking system, and community banks in particular, and to benefit from this public discussion.

The report summarizes conditions in the U.S. economy, financial markets, and banking industry, and presents key risks to banks in two broad categories: credit risk and market risk. The credit risk areas discussed are agriculture, commercial real estate, energy, housing, leveraged lending and corporate debt, and nonbank lending. The market risk areas discussed are interest rate risk and deposit competition, and liquidity. Section I is an executive summary. Section II is an overview of economic, financial market, and banking industry conditions. Section III is our assessment of the key credit and market risks facing banks.[2]

[1] For more information on the FDIC's *Trust through Transparency* initiative, see **https://www.fdic.gov/transparency/**.

[2] This report contains information available as of July 15, 2019.

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Section I: Executive Summary

Consensus forecasts suggest U.S. economic growth will slow in 2019 from recent highs, as the economic expansion enters its tenth year. Economic growth strengthened to above trend in 2018, thanks primarily to tax cuts and increased consumer spending. Strong labor market conditions also supported the economic expansion, as hiring continued and wages improved. Business investment increased in 2018, reflecting the health of the overall economy. Tariffs on traded goods reduced U.S. exports, and uncertainty about global trade may contribute to slower future growth if consumers and businesses delay purchase or investment decisions. Other factors affecting the outlook include ongoing political risks in Europe and a global economic slowdown that began in 2018.

Financial markets reflected expectations for slower economic growth, and volatility returned to financial markets in 2018 and early 2019, following several years of steady, positive performance. The U.S. Treasury yield curve flattened significantly in 2018 as the Federal Open Market Committee raised the target range for the federal funds rate four times during the year. The average net interest margin improved for the banking industry in 2018, as average asset yields generally increased more rapidly than average funding costs. However, 31 percent of banks reported a decline in their net interest margin in 2018, as their average funding cost generally increased faster than their average asset yield. Asset yields have declined for a number of banks as the yield curve flattened.

Growth in the leveraged loan market accelerated over the past two years as demand from yield-seeking investors increased. Concerns about reduced underwriting standards escalated with an increase in the prevalence of loans with weak covenants and less rigorous documentation standards. The stock market was adversely affected by price volatility in 2018, and several indices ended the year with negative annual returns. Despite strong earnings reports, bank stocks were volatile and underperformed relative to broader indices as interest rate expectations dampened the market outlook.

FDIC-insured institutions performed well in 2018. The strong financial condition of banks contributed to a declining number of institutions on the Problem Bank List and no bank failures during the year. Net income for FDIC-insured institutions increased 44 percent from 2017 to a record $236.7 billion in 2018, driven by higher net operating revenue and a lower effective tax rate. Loan growth continued and loan performance metrics remained strong for both the banking industry as a whole and community banks. However, slower growth in the broader economy is beginning to affect the banking industry. Loan growth has slowed over the past three years, particularly in real estate-related portfolios. In addition, agriculture loan noncurrent rates are rising amid low commodity prices and farm incomes. Still, banks held more and higher-quality capital than they did during the financial crisis, in part because of post-crisis regulatory capital requirements.

Consolidation within the banking industry accelerated in 2018. The pace of net consolidation rose in 2018 for the first time since 2015 and remains relatively high by historical standards. Net consolidation is primarily driven by voluntary inter-company mergers. In 2018, 230 charters were merged out of existence and seven were acquired by credit unions. Consolidation activity was partially offset by new chartering activity: eight newly chartered and insured institutions were established in 2018, the most since 2010.

Community banks continue to report lower consolidation rates than noncommunity banks. When acquisitions have occurred, community banks have typically been acquired by other community banks.[3] In the ten years ending 2018, the share of community banks that were acquired by other community banks was 68 percent. Community banks also reported lower rates of attrition compared with noncommunity banks: 4.7 percent of community banks that reported financial results at year-end 2017 exited the industry in 2018, compared with 5.4 percent of noncommunity banks.

[3] The FDIC identifies community banks not by total asset size, but instead by a broader set of criteria related to traditional lending and deposit gathering activities and limited geographic scope. See FDIC Community Banking Study at **https://www.fdic.gov/regulations/resources/cbi/report/cbi-full.pdf**.

Key Risks to Banks

Past banking crises have been frequently associated with economic activity related to a specific sector or geographic area. While the discussion of risks in this report is organized by topic, it is important to bear in mind that the confluence of risks facing institutions exposed to multiple sectors or geographies may present challenges that are difficult to foresee and therefore warrant attention.

Credit Risk: After ten years of economic growth, loan performance metrics at FDIC-insured banks remain strong. However, institutions with concentrations of credit have greater exposure to market sector changes. Competition among lenders has increased as loan growth has slowed, posing risk management challenges. Market demand for higher-yielding leveraged loan and corporate bond products has resulted in looser underwriting standards.

- **Agriculture: The agricultural economy is now in its sixth year of low commodity prices and farm incomes, and agricultural exports have reflected pressure from trade uncertainties and slowing global growth.** A slowdown in the agricultural economy is an important risk to the FDIC because farm banks are a large source of financing for the agriculture industry and represent about one-fourth of banks in the United States. Farmland values have been relatively resilient to the downturn in farm profits and have partially insulated borrowers and lenders from more serious credit quality deterioration. While asset quality metrics at farm banks are beginning to weaken, loan restructuring has helped keep credit problems at bay and loan delinquencies below levels experienced during the 1980s farm crisis. Farm bank liquidity has declined as farmers have shifted from being net depositors to net borrowers.

- **Commercial Real Estate: Commercial real estate (CRE) market fundamentals remain favorable as the economic cycle matures. However, outstanding CRE loan balances are rising, and competition among lenders to maintain market share in the face of slowing loan growth is increasing.** Vacancy rates are low, and property prices and rents continue to grow for CRE in general. But, overbuilding in some multifamily and industrial segments and oversupply of outdated retail properties may weigh on CRE fundamentals going forward. During the last crisis, banks considered to be CRE lending specialists failed more than twice as often as the average community bank.[4] In the current environment, CRE loan growth has slowed, and bank portfolios are more concentrated in existing property loans rather than historically vulnerable construction loans. Competition among banks for quality CRE loans poses challenges for institutions lending to the CRE sector as loan growth has slowed. FDIC examination findings since mid-2017 noted opportunities for improvement in risk management practices for CRE-concentrated institutions, particularly in the areas of board governance and oversight and portfolio stress testing. Despite the competitive pressures, CRE credit quality metrics at insured institutions remain satisfactory in early 2019.

- **Energy: U.S. oil production reached record highs in 2018, but the energy industry is susceptible to volatility that has produced past boom and bust cycles. Banks most exposed to this geographically concentrated industry are vulnerable to future downturns.** Banks in oil- and gas-concentrated areas were resilient to the 2014 to 2016 energy industry stress. Indeed, no banks in those areas failed during that period. However, asset quality deteriorated, particularly in the portfolios of large and regional banks, as reported in the 2015 to 2017 Shared National Credit reviews. Improved economic conditions in the energy sector in 2018 led to strengthened prospects for energy credits at banks, but energy sector high-yield debt remains elevated.

[4] FDIC Community Banking Study, December 2012, 5-13, https://www.fdic.gov/regulations/resources/cbi/report/cbi-full.pdf. The study covers the period from 1984 to 2011. The study defines CRE lending specialists as banks that hold construction and development loans greater than 10 percent of assets or total CRE loans (C&D, multifamily, and secured by other commercial properties) greater than 30 percent of total assets.

- **Housing: The housing market began to slow in 2018 as concerns about affordability intensified. Banks with concentrations in this portfolio could be vulnerable to the slowdown, but credit quality has been resilient so far.** Rising home prices, low inventory, and rising mortgage rates reduced affordability in many markets and led to a decline in home sales in 2018. While mortgage rates came down in 2019, the housing market continued to slow. Residential mortgage loan concentrations have declined from post-crisis peaks but remain elevated at community banks in some areas. Credit quality metrics for residential mortgage loans are relatively strong.

- **Leveraged Lending and Corporate Debt: Nonfinancial corporate debt as a share of gross domestic product (GDP) has reached a record high level. The increase has been driven by growth in corporate bonds and leveraged loans, which have become increasingly risky as the share of low-rated bonds has grown and lender protections in leveraged loans have deteriorated.** Partly in response to low interest rates, corporate debt levels reached a record high 46.9 percent of GDP in 2018.[5] Investors reaching for yield increasingly funded leveraged loans to highly indebted companies that lacked traditional lender protections. Direct bank exposure to corporate debt is concentrated in revolving leveraged loans, traditional commercial and industrial loans, and commercial mortgages. In contrast, indirect exposures are opaque and could transmit corporate sector stress into the banking system.

- **Nonbank Financial Institution Lending: By lending to nondepository financial institutions, banks are increasingly accruing direct and indirect exposures to these institutions and to the risks inherent in the activities and markets in which they engage.** Bank lending to nondepository financial institutions, which is primarily driven by noncommunity banks, has expanded seven-fold since 2010 and now exceeds $400 billion.

Market Risk: The current interest rate environment presents earnings and funding challenges to banks and could pressure liquidity at some institutions.

- **Interest Rate Risk and Deposit Competition: Banks have enjoyed several years of abundant low-cost deposit funding, but they could be challenged if deposit competition intensifies.** After a delayed response to the rising interest rate cycle that began in fourth quarter 2015, consumer preferences have shifted toward interest-bearing deposits, which are becoming increasingly expensive for both community and noncommunity banks. Community banks are especially vulnerable to this trend because of competitive pressures with noncommunity banks. The effects of increased competition on deposit costs have not yet affected aggregate net interest margins. However, nearly one-third of banks have seen a decline in their net interest margin since fourth quarter 2015, generally due to an increase in funding costs but also partly because of a decline in asset yields at some banks. Many rural community banks face added deposit retention challenges associated with long-term demographic shifts and the recent downturn in the agriculture industry.

- **Liquidity: Short-term liquidity at smaller banks has declined in recent years, potentially reducing these institutions' ability to manage a future downturn.** Steady loan growth has resulted in a decline in short-term liquid assets and increased reliance on wholesale funding sources for banks with total assets of less than $100 billion. Institutions with additional risk factors, such as higher loan concentrations, also generally have lower liquid assets and higher wholesale funding, sometimes significantly so. A turn in the credit cycle could be detrimental to institutions with low levels of liquidity or high levels of wholesale funding, particularly if a sale of securities is required to meet liquidity demands or if access to certain types of funding is limited.

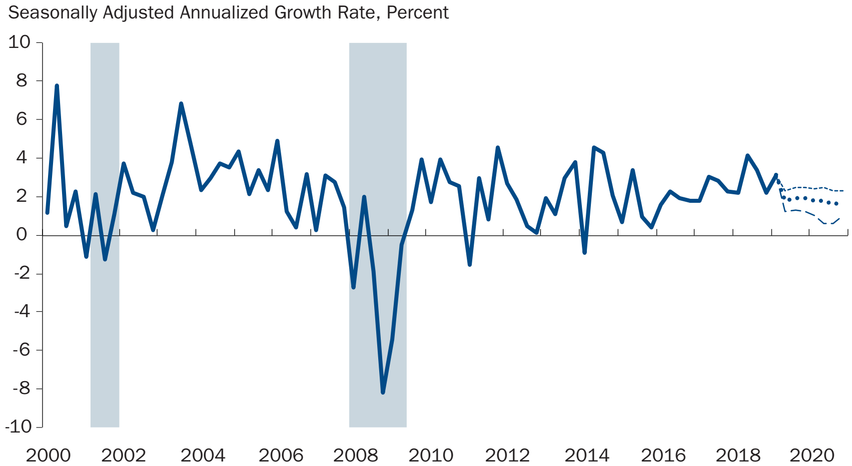
[5] Nonfinancial business debt, including loans to both corporate and noncorporate borrowers, reached 73.2 percent of GDP in 2018, nearing the all-time high of 73.7 percent set in 2009.

Section II: U.S. Economy, Financial Markets, and Banking Industry Overview

U.S. Economic Overview

- *Economic fundamentals remain favorable, even as growth slows.*
- *Consumer spending and strong labor market conditions continue to support economic growth.*
- *Business investment moderated after strong growth in 2018.*
- *Housing markets continue to slow in 2019 despite lower interest rates.*
- *Changes to international trade policy offer both upside and downside risks.*

Chart 1
Real Gross Domestic Product Growth Was Strong



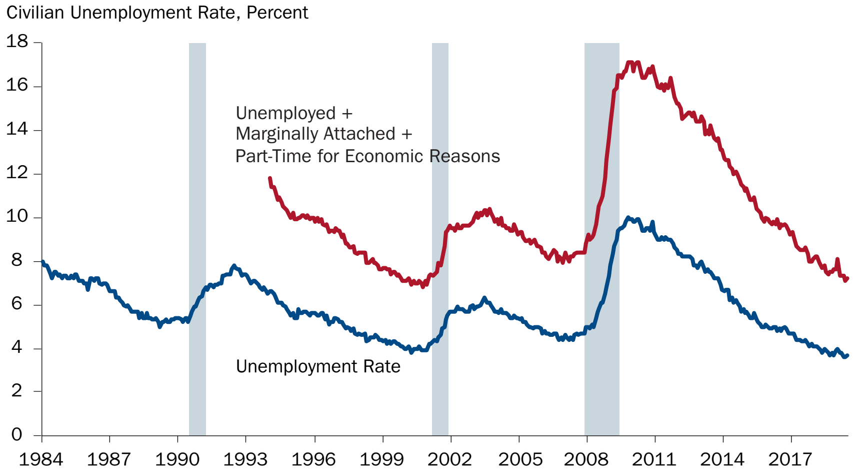
Sources: Bureau of Economic Analysis, (Haver Analytics), Blue Chip Economic Forecasts
Notes: Dotted lines represent the Blue Chip forecast range as of July 2019. Recessions shaded.

The 2019 outlook is for economic growth to continue at a slower pace than recent highs. Consensus forecasts suggest the pace of economic growth will moderate to 2.5 percent in 2019 supported by favorable economic fundamentals (Chart 1). The expected slowdown in 2019 follows near 3 percent growth in 2018, which was helped by tax cuts under the Tax Cuts and Jobs Act enacted in late 2017.

The current economic expansion turned ten years old in July 2019 and is the longest expansion on record since the 1850s.[6]

[6]National Bureau of Economic Research, U.S. Business Cycle Expansions and Contractions.

Chart 2
The Unemployment Rate Is at Its Lowest Level in Decades



Source: Bureau of Labor Statistics (Haver Analytics)
Note: Recessions shaded. Monthly data through June 2019.

Consumer spending continues to support economic growth. Consumer spending makes up the largest portion of U.S. gross domestic product (GDP), contributing roughly 70 percent to GDP historically. Consumer spending was a bright spot for economic growth in 2018, though it slowed in first quarter 2019. Robust employment growth has supported gains in consumer spending during this economic expansion. Stronger labor market conditions with high employment and wage gains have supported overall economic growth and demand for mortgages, consumer loans, and lines of credit. Steady hiring has pushed the unemployment rate to the lowest level in decades (Chart 2). Wage growth picked up recently, a further sign of labor market strength. Despite the increased cost pressures on businesses, higher wages have contributed to growth in consumer spending. Broader measures of underemployment, including workers who are part-time for economic reasons, marginally employed workers, workers in jobs below their skill level, and those who have given up looking for employment, also have returned to pre-recession levels. Labor markets do not show signs of overheating, as the recent growth in wages has been moderate in spite of demographic issues such as an aging workforce and lower labor force participation. Household leverage remains modest, as debt levels have lagged gains in asset values, suggesting consumers in aggregate are not overextending their finances and that fundamentals for consumer spending are sound. These conditions supported consumer sentiment, which helped support consumer spending and broader economic activity.

While consumer sentiment and spending remained strong, business sentiment and investment moderated in 2019. Business investment and confidence picked up in 2018 helped by a boost from tax cuts, but moderated in 2019 as the tax effects waned and businesses faced higher uncertainty around the economic outlook. Capital spending growth declined and manufacturing conditions weakened in 2019, as industrial production slipped in late 2018 and contracted during the first part of 2019. Business sentiment indicators, which affect future investment and hiring decisions, also weakened. Slower business investment may ultimately weaken economic conditions and reduce business demand for banking services.

Inflation softened in 2019 after increasing in 2018. Higher inflation in 2018, supported in part by higher oil prices, contributed to the Federal Reserve's decision to increase interest rates four times in 2018. Inflationary pressures softened by late 2018, with lower oil prices reflecting increased shale production, a depressed outlook for global demand, and strong global supply.

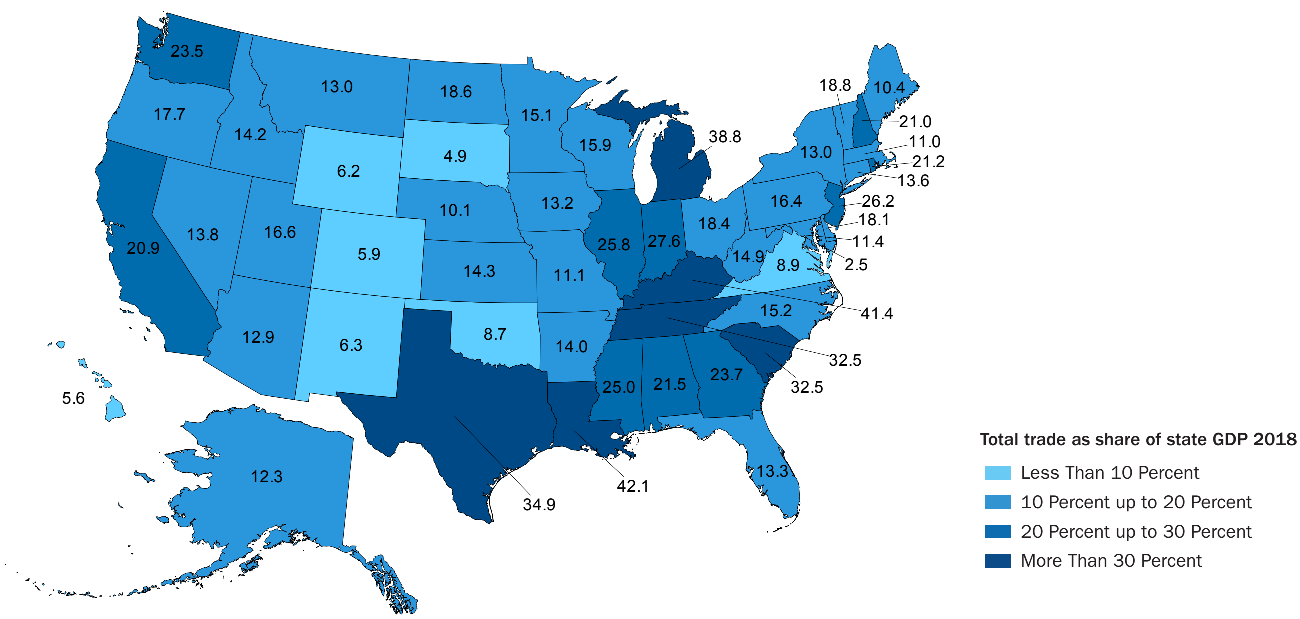
Inflation expectations based on consumer surveys suggest consumers do not expect prices to increase significantly in the near term.[7]

Housing markets continue to slow in 2019. Home price growth slowed in many major markets as high prices reduced affordability, and home sales are down from year-earlier levels despite lower mortgage rates. However, housing market fundamentals remain positive. Higher employment and rising wages supported housing demand. Lack of housing supply, due to increased costs of materials, limits on available land for new construction, and shortages of skilled construction workers, continue to weigh on sales. The 2017 tax legislation, which changed state and local tax exemption limits and the home mortgage deduction, reduced certain tax benefits for some homeowners. While the overall effects are hard to predict, areas with higher housing costs or property taxes could see decreased demand and a slowdown in price increases, or outright price declines. Housing supply is expected to remain tight and prices are expected to continue to rise but at a slowing pace in most areas.

Changes in long-standing U.S. trade policy in 2018 and early 2019 dampened trade activity. Steel and aluminum tariffs were implemented in March 2018, and several rounds of tariffs were imposed on Chinese goods during the year. These tariffs contributed to a slight decline in U.S. exports in the second half of 2018 and a small estimated effect on inflation and economic growth. In 2019, trade developments weakened business sentiment and manufacturing conditions.[8] Another round of tariffs that were imposed on China in May 2019 could further impact the economy, particularly in states that are most dependent on trade (Map 1). The U.S. also announced a trade agreement with Canada and Mexico to replace the North America Free Trade Agreement (NAFTA). The United States-Mexico-Canada Agreement (USMCA), if approved, may affect output, exports, and employment, particularly for the auto industry in the South and Midwest. The effects will vary by industry but should have a positive effect overall on the economy. The USMCA could especially benefit states along the U.S.-Mexico border. However, specific provisions regarding rules of origin and wage labor content may result in a decline in specific trade flows in other regions and industries.

Map 1

A Large Share of State GDP Is Dependent on Trade



Sources: U.S. Bureau of Economic Analysis, U.S. International Trade Administration, FDIC staff analysis

[7]Surveys on inflation expectations include the Survey of Professional Forecasters, conducted by the Federal Reserve Bank of Philadelphia; the University of Michigan Surveys of Consumers; and the Survey of Consumer Expectations, conducted by the Federal Reserve Bank of New York.

[8]Federal Reserve Board of Governors, Monetary Policy Report, Box 1, "The Persistent Slowdown in Global Trade and Manufacturing," July 2019.

A substantial amount of cross-border activity and investment occurs between the United States, Mexico, and Canada, particularly related to manufacturing. The USMCA may augment the existing tariff-free, export-oriented manufacturing program, an important part of U.S. corporate strategy to achieve competitively priced goods in the world marketplace. Increased uncertainty about either tariffs or trade agreements may have larger long-term effects as consumers and businesses delay purchases and investment decisions.

Vulnerabilities persist for industries and regions with high trade exposure. Sectors such as agriculture, computers and electronic products, and transportation equipment have significant volumes of imports and exports with China, the European Union (EU), Canada, and Mexico, jurisdictions that could become the target of additional tariffs. Tariffs have disrupted supply chains, which has increased production costs in certain industries and regions, and may result in adverse regional economic effects.

The trade effects have weighed most on the transportation and agricultural sectors, as these sectors have been subject to China's tariffs. In 2017, transportation equipment accounted for 23 percent of total U.S. exports to China, and agricultural products accounted for 12 percent. Transportation equipment exports facing tariffs fell 8 percent in third quarter 2018. Soybean production is heavily concentrated in the Midwest, with Illinois and Iowa production accounting for more than $11 billion, or just over 28 percent, of all domestic soybean production in 2018. Prices of soybeans fell more than 10 percent in 2018 after the enactment of Chinese soybean tariffs in the summer. For many U.S. soybean farmers, prices were below production costs in 2018.[9]

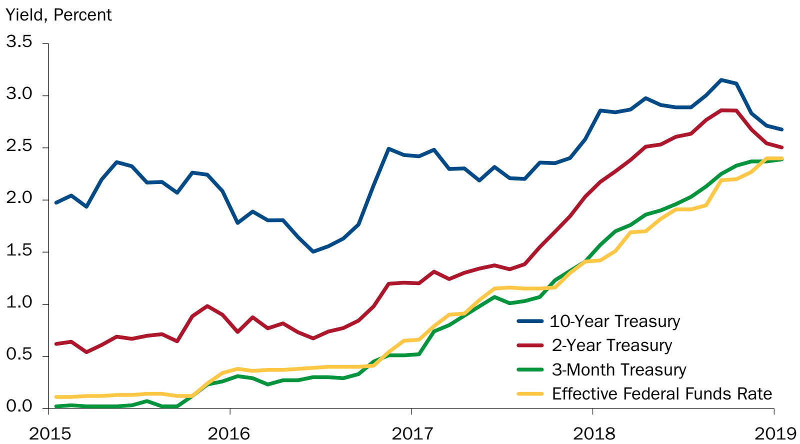
The slowdown in U.S. economic growth in 2019 is expected to be small compared with other major economies. Global economic growth has slowed in 2019, led by weaker growth in China and Europe. Trade uncertainty weighs on the global economic outlook. China's economic slowdown that began in 2018 reflects tighter credit conditions and reduced investment. Political risks in Europe, including the as-yet uncertain terms of the United Kingdom leaving the EU (Brexit), could have broad-ranging effects on the global economy and banking system. While the direct impact of Brexit on the U.S. economy and banking sector may be limited, adverse financial market reactions to the terms of Brexit may pose indirect risks to U.S. markets and institutions. Central banks have responded to weaker economic conditions as global monetary policy remains accommodative overall. Both the Bank of England and the European Central Bank have eased plans announced in 2018 to tighten monetary policy, causing interest rates to decline globally. These global factors are contributing to slower global growth and may reduce U.S. economic activity.

[9]United States Department of Agriculture. Soybean Costs and Returns data.

Financial Markets

- ***The U.S. Treasury yield curve flattened in 2018, signaling the possibility of a weakening economy.***
- ***Volatility returned to financial markets in 2018 following several years of steady performance.***
- ***Stocks and bonds reversed course in the fourth quarter and performed poorly on the year.***
- ***Bank stocks were more volatile than the broader stock market in 2018.***

Chart 3
The Gap Between Yields on Treasuries of Varying Maturities Narrowed in 2018



Source: Federal Reserve Bank of St. Louis

The U.S. Treasury yield curve flattened significantly in 2018. The Federal Open Market Committee raised the target range for the federal funds rate four times in 2018, increasing the upper end of the target range from 1.5 percent at year-end 2017 to 2.5 percent at year-end 2018. The three-month U.S. Treasury bill yield followed closely, rising from 1.4 percent in January 2018 to 2.4 percent in January 2019. At the two-year and ten-year maturity points, U.S. Treasury yields rose 59 basis points and 29 basis points, respectively, in 2018. These moves compressed the spread between the two-year and ten-year yields from 51 basis points at the start of 2018 to just 21 basis points at year-end (Chart 3). The spread between the ten-year and two-year yields is of particular interest because an inversion, or negative value, is considered a potential indicator of a recession. Historically, a recession occurs six months to two years after the curve inverts. Further, banks are adversely affected by a flatter yield curve because they typically make longer-term loans while accepting shorter-term deposits.

Despite the flattening yield curve, bank average net interest margins (NIMs) rose in 2018. Banks were able to increase total interest income in 2018 by more than enough to offset the increase in funding costs, causing NIMs to expand. The average NIM for the industry was 3.5 percent in fourth quarter 2018, up 17 basis points from a year earlier. Deposit betas, which measure the percentage change in the federal funds rate that banks pass on to depositors, trended higher for most of 2018. According to some analysts, early signs point to continued increases in deposit costs in 2019 and, in a reversal from 2018, a decline in bank NIMs. Some banks have experienced a decline in asset yields as the yield curve has flattened, putting downward pressure on NIMs.

Corporate bonds performed poorly in the 2018 rising rate environment. Corporate bonds and bond funds lost value in 2018, as rising interest rates caused bond prices to fall. Other factors contributing to declining asset prices in 2018 were concerns about slowing economic growth, ongoing trade negotiations, increased tariffs, and higher oil prices. High-yield and investment-grade debt issuances were both down in 2018 compared with the previous year.[10] In late 2018, market conditions deteriorated and the primary market for debt issuance softened considerably. The high-yield bond market did not have a new issuance for 41 days at the end of 2018, the longest such period since 1995. Investment-grade bond issuance also stalled in December, declining more than 90 percent from previous months. The corporate bond market recovered in early 2019, and issuances returned to normal levels.[11] Prices for major corporate bond indices are positive for the year.

Measures of secondary market liquidity were generally positive in 2018. Corporate bond trading volumes continued on an upward trend, and bid-ask spreads remained tight. However, the growth of BBB-rated bonds is a concern. These bonds, which are rated just above speculative grade status, accounted for 49 percent of all investment-grade bonds in 2018, up from 33 percent in 2008. Market liquidity issues could occur if a significant portion of BBB-rated bonds are downgraded to speculative grade within a short period and mutual funds, insurance companies, and other investors with investment mandates are forced to sell a large volume of those bonds quickly.

The leveraged loan market received increased scrutiny in 2018. The U.S. leveraged loan market surpassed $1.3 trillion in 2018, making it larger than the high-yield corporate bond market. Leveraged loans are usually arranged by a syndicate of banks and made to companies that are heavily indebted or have weak credit ratings. Leveraged loans typically are floating rate loans and generally are extended to fund leveraged buyouts, stock buybacks, or dividend payments. While the leveraged loan market has experienced a period of sustained growth since 2010, growth has accelerated over the past two years as the demand for adjustable-rate products has increased. Non-bank investors hold most institutional U.S. leveraged loans, with U.S. banks holding only about 7 percent of institutional leveraged loans issued in the first half of 2019.[12] In the United States, more than half of all leveraged loans are purchased and packaged into collateralized loan obligations (CLOs), which are sold to investors, including U.S. banks. The volume of CLOs outstanding at the end of 2018 reached an all-time high of $616 billion.[13] Strong demand from CLOs and yield-seeking investors has allowed issuers to ease underwriting standards and documentation requirements. Loans with weak covenants are sometimes referred to as “covenant-lite” or “cov-lite.” Banks could be indirectly exposed to risks in leveraged loans through their holdings of CLOs as well as their loans to nonbank financial institutions. Banks also face exposure to leveraged loan borrowers through revolving credit lines.

[10] Securities Industry and Financial Markets Association research and data.

[11] Ibid.

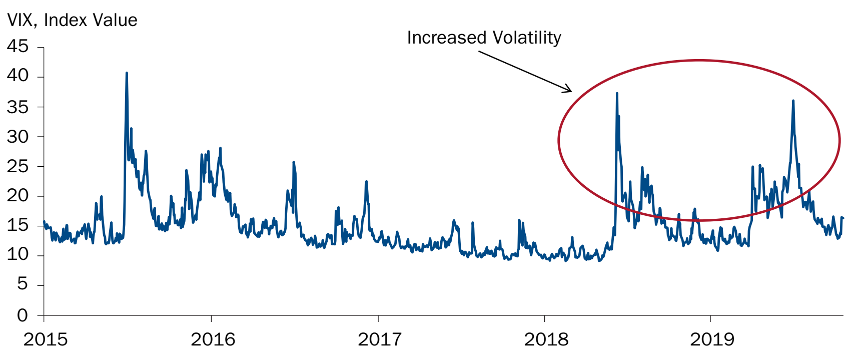
[12] Standard & Poor’s Leveraged Commentary and Data (LCD).

[13] Securities Industry and Financial Markets Association research and data.

In 2018, the stock market posted its first annual decline across all three major indices since the end of the financial crisis. The Dow Jones Industrial Average (DJIA), Standard and Poor's (S&P) 500, and National Association of Securities Dealers Automated Quotations (NASDAQ) index declined 5.6 percent, 6.2 percent, and 3.9 percent, respectively. Asset prices appreciated with historically low volatility in 2017, but 2018 brought increased volatility to financial markets. In early February 2018, the Chicago Board Options Exchange Volatility Index (VIX), one measure of market volatility, spiked more than 20 points, or 117 percent, in a single day to a level not seen since August 2015.[14] That same day, the DJIA dropped by a record 1,175 points. Analysts believe that the building popularity of "short volatility" bets, which use futures or options tied to the value of the VIX, has exacerbated volatility swings. In 2018, the VIX averaged 16.6, close to the historic median but higher than the 2017 average of 11.1 (Chart 4). Cross-asset correlations, which measure the tendency for prices of dissimilar assets to move together, trended higher in 2018, particularly when volatility was high. The S&P 500 experienced two corrections in 2018 when the index fell more than 10 percent from the previous high. Equity indexes rebounded in early 2019, approaching and in some cases setting record highs in April, as the Federal Reserve signaled a stabilization in interest rates.

Bank stock prices, which are sensitive to interest rate and economic conditions, fluctuated more sharply than the broader market throughout 2018. The Keefe, Bruyette, and Woods (KBW) Bank Index, a benchmark index for the banking sector that includes 24 banking stocks, fell 19.6 percent in 2018, outpacing the decline in the broader market despite the industry's solid earnings. The prospect of future interest rate increases and the potential for further flattening or inversion of the yield curve may have contributed to the banking sector's underperformance in 2018. The price of credit protection for banks increased in the first and fourth quarters of 2018, reflecting elevated market volatility and eroding financial market liquidity. Bank stocks have continued to lag the broader market in 2019.

Chart 4
Volatility Returned to Financial Markets in 2018



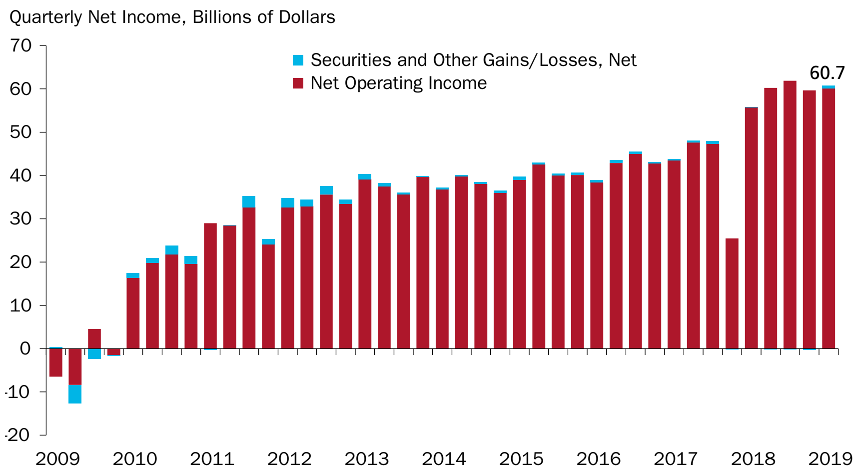
Source: Yahoo! Finance
Notes: Daily data through March 2019. VIX is the Chicago Board Options Exchange Volatility Index, a measure of financial market volatility.

[14]The VIX is sometimes referred to as Wall Street's "fear gauge" because it tends to rise when equity prices fall.

Banking Industry Overview

- ***Net income for FDIC-insured institutions reached a record level in 2018.***
- ***The industry continues to experience positive year-over-year loan growth.***
- ***Loan performance indicators remain strong.***
- ***Banks hold higher levels of higher-quality capital than in recent years.***

Chart 5
FDIC-Insured Institutions Earned Record Profits in 2018



Source: FDIC
Note: Quarterly data through first quarter 2019.

The banking industry continues to report strong financial performance. As of first quarter 2019, the 5,362 FDIC-insured institutions benefited from greater net income, strong asset quality indicators, and additional capital formation (Chart 5). The number of problem banks is at the lowest level in more than ten years, and no banks failed in 2018.

Net income at FDIC-insured institutions rose 44 percent from 2017 to $236.7 billion in 2018. The record profits in 2018 were primarily due to higher net operating revenue and a lower effective tax rate following passage of the Tax Cuts and Jobs Act in December 2017. The FDIC estimates that absent tax reform effects, 2018 net income would have been 14 percent higher than in 2017. In first quarter 2019, bank profits rose $4.9 billion (8.7 percent) compared with first quarter 2018, owing to higher net interest income, gains in securities portfolios, and lower noninterest expense. The share of unprofitable banks fell to 3.9 percent from 4.1 percent a year earlier on higher earnings industry-wide.[15]

A combination of loan growth and widening NIMs continued to drive increases in net interest income among banks. Interest rate hikes so far have benefitted most of the industry, as assets have repriced faster than liabilities including deposits. This has been especially true for large banks, which hold a higher share of short-term assets on their balance sheets. However, interest rate increases have put upward pressure on rates paid by banks to depositors. As a result, banks are seeing a shift in their liability mix away from noninterest-bearing balances and toward interest-bearing balances. In first quarter 2019, the increase in average cost of funds exceeded the increase in average asset yields, resulting in a decline in NIM for the industry (Chart 6). In addition to

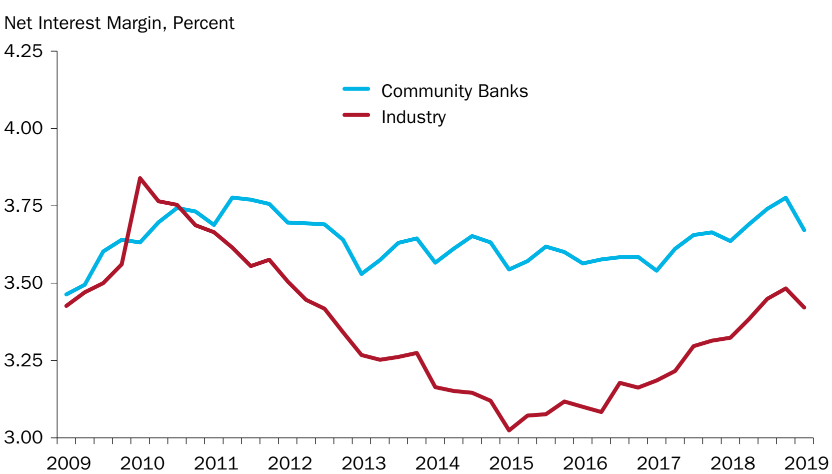
[15] The Tax Cuts and Jobs Act led to large increases in income tax expenses in fourth quarter 2017 because of one-time write-downs of deferred tax assets. The subsequent lower income taxes realized in 2018, coupled with the above-average tax expense in 2017, contributed to the growth and record levels of bank profits in 2018. See FIL-6-2018, New Tax Law: Accounting and Reporting Implications, https://www.fdic.gov/news/news/financial/2018/fil18006.html.

the rise in funding costs, asset yields have declined at some banks as the yield curve has flattened, putting further downward pressure on NIMs. The decline in NIMs in first quarter 2019 is also partly attributable to seasonal factors, as NIMs typically decline from fourth quarter to first quarter.

Banks' noninterest income declined year-over-year in first quarter 2019, primarily because of lower servicing fee income and other noninterest income. Slightly more than half the industry (52.6 percent) recorded year-over-year decreases in noninterest income, as recent market volatility caused declines in securitization income. These declines had the most pronounced impact on larger institutions that are more active in securitization. Noninterest expenses decreased for banks in first quarter 2019 from the year-earlier quarter, as increases in salaries and employee benefits were more than offset by declines in other noninterest expenses.

Loan growth continued at rates below those reported in recent years. Loan balances increased from a year earlier in all major categories in first quarter 2019.[16] The strongest growth rates were in the commercial and industrial (C&I), commercial real estate (CRE), and consumer loan categories. The growth rate of loans secured by real estate, while positive, has been gradually slowing since 2016. The acquisition, development, and construction (ADC) loan category has slowed most within the broader CRE portfolio. ADC loan balances for the industry increased only 2.8 percent year-over-year in first quarter 2019 after increasing 12.1 percent in first quarter 2017 and 15.7 percent in first quarter 2016. Aggregate loan growth in first quarter 2019 was slightly negative (down 0.05 percent) compared with fourth quarter 2018 because of seasonal declines in consumer loans, specifically credit card loans. Credit card balances declined $43.5 billion (4.8 percent) in first quarter 2019 as nearly 14 percent of banks decreased their credit card holdings. All other major loan categories reported quarterly increases.

Chart 6
Community Banks Continue to Record Higher Net Interest Margins Than the Industry



Source: FDIC
Note: Quarterly data through first quarter 2019.

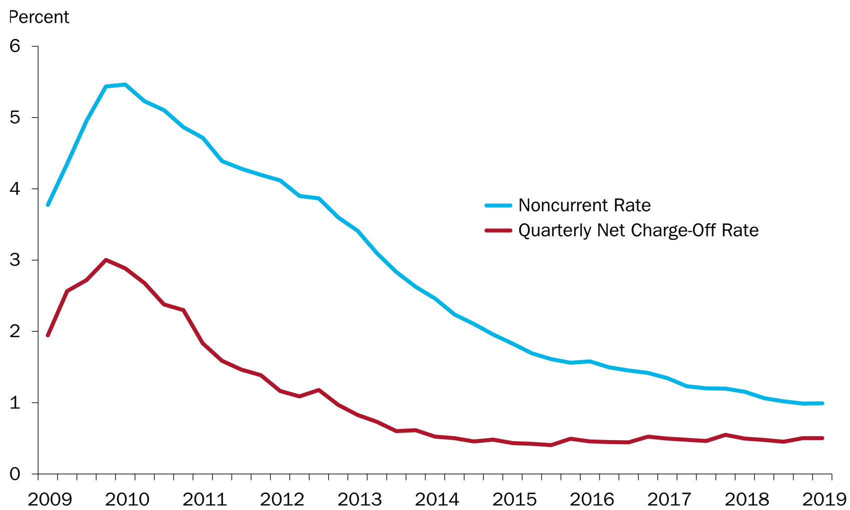
[16]Major loan categories include commercial and industrial loans, residential mortgage loans, consumer loans, and nonfarm nonresidential loans. Consumer loans include credit card, automobile loans, and all other consumer loans.

Community banks reported a merger-adjusted 6.6 percent annual increase in loan and lease balances in first quarter 2019, exceeding the growth rate of noncommunity banks by nearly 3 percentage points. Community banks reported a higher year-over-year growth rate than noncommunity banks in almost all loan categories. The largest increases for community banks were in ADC, multifamily, nonfarm nonresidential, and C&I loan portfolios. Compared to community banks, noncommunity banks reported a larger percentage increase in credit card loans. Loans and leases represented 56.1 percent of the banking industry's total assets as of first quarter 2019 and have remained a relatively stable share the past several years. Securities represented 21 percent of bank assets, a majority of which (60 percent) are mortgage-backed securities.

The current economic expansion continues to support loan performance across the banking industry. Noncurrent loan balances in first quarter 2019 were below 1 percent and are at an 11-year low primarily because of improving performance for residential mortgages (Chart 7). However, first quarter 2019 also saw an increase in C&I noncurrent loans, which increased the C&I noncurrent rate by 14 basis points to 0.82 percent. The dollar amount of noncurrent farm loans continues to rise as the agriculture industry struggles amid low commodity prices. While low overall, the noncurrent rate for farm loans at community banks (1.28 percent) is at the highest first-quarter rate since 2011.[17] Net charge-offs remain low and stable.

Banks hold higher levels and higher-quality capital than during the financial crisis, owing to post-crisis regulatory capital requirements. This capital provides the banking industry resiliency to sustain potential future losses.

Chart 7
Noncurrent Loan Rate and Quarterly Net Charge-Off Rate Remain Low



Source: FDIC

[17] Agriculture loan volume, delinquency, and charge-off data are seasonal, and therefore historical comparisons are best made on a same-period basis.

Section III: Key Bank Risk Issues

Agriculture

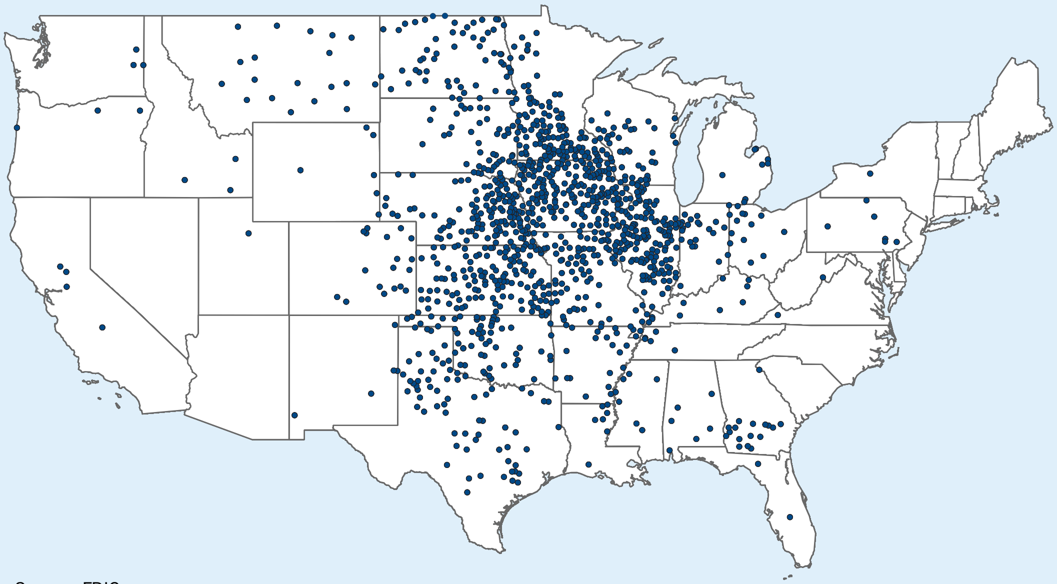
- ***The agricultural economy is now in its sixth year of low commodity prices and farm incomes, and agricultural exports are under pressure from trade uncertainties and slowing global growth.***
- ***Strong farmland equity has enabled farmers to restructure loans to manage operating losses and replenish working capital, keeping reported credit problems low at insured institutions.***
- ***Farm bank asset quality and liquidity measures are lower in 2018 than recent years but remain stronger than the levels reported during the 1980s farm bank crisis.***

As of first quarter 2019, there were 1,315 farm banks representing nearly one-quarter of all FDIC-insured institutions. During first quarter 2019, agriculture loans held by FDIC-insured institutions totaled $184 billion.

- Community banks hold 69 percent ($127 billion) of total agriculture loans.
- Eight percent of all banks and 31 percent of farm banks hold a concentration of agriculture loans above 300 percent of total capital.
- Exposure to agriculture lending is concentrated in the Midwest.

Regional Exposure to Agriculture Lending

Dots on map represent banks with total agriculture loans above 300 percent of total capital.

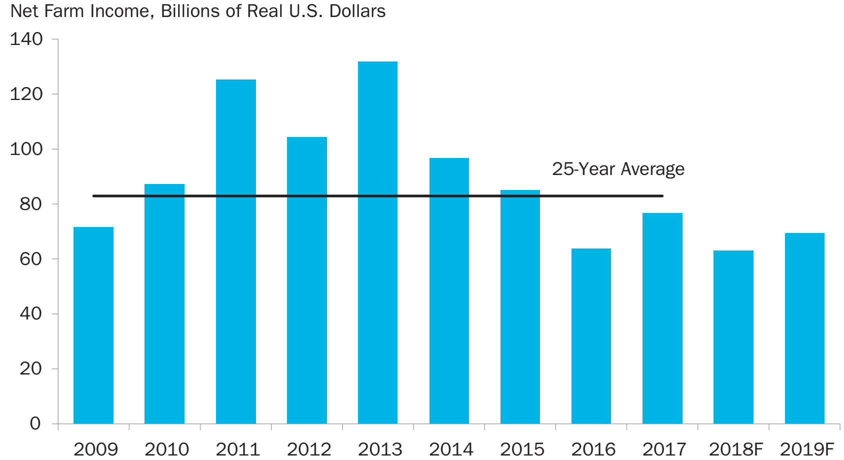


Source: FDIC

The agricultural sector struggles amid low commodity prices that continue to depress farm profitability. The farm economy has faced low commodity prices since farm income peaked in 2013. Net farm income, a broad measure of profits, is forecast to increase 10 percent in 2019 but remain below the 25-year average (Chart 8). Lower prices for soybeans, corn, pork, and dairy products have been the primary contributors to reduced farm income during the past six years. According to the United States Department of Agriculture's (USDA) long-term forecast, real agricultural commodity prices will continue to decline over the next ten years as global production outstrips demand.

Chart 8

Net Farm Income Is Expected to Remain Below the Historical Average in 2019

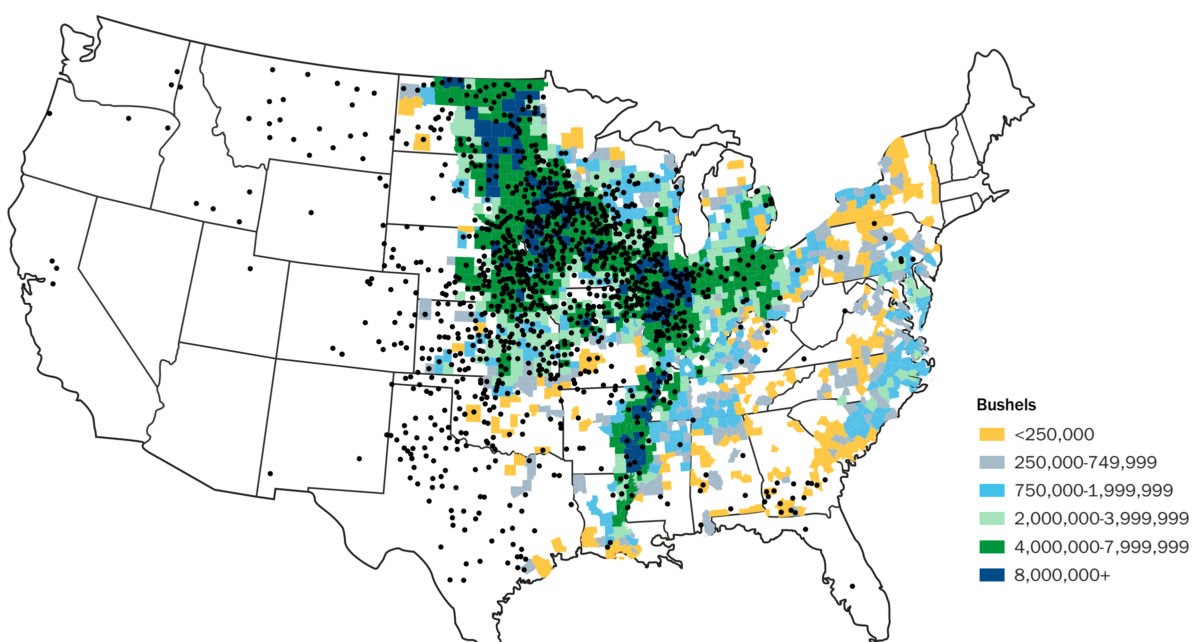


Source: U.S. Department of Agriculture (USDA).
Notes: Dollar values are adjusted for inflation. 2018 and 2019 figures are USDA forecasts (F). The average is calculated for the 25 years ending in 2017.

Map 2

Soybean Production Is Heavily Concentrated in the Midwest

Dots on map represent farm banks as of December 31, 2018.



Source: U.S. Department of Agriculture

U.S. agricultural exports are facing increased pressure because of trade uncertainty, weakening global demand, and a strengthening dollar. In 2018, China imposed tariffs on several U.S. agricultural products, the most significant being a 25 percent tariff on U.S. soybeans. More than one-quarter of the U.S. soybean crop is exported to China annually. Recent tariffs are negatively affecting price and trade volumes, which could translate to stress for lenders in areas that rely on soybean production, primarily Midwest states (Map 2). After Chinese soybean tariffs went into effect in July 2018, U.S. soybean prices dropped more than 5 percent through year-end. Through the first seven months of the 2018 to 2019 marketing year (September 2018 through March 2019), U.S. agriculture export volume to China was down 82 percent compared with the prior three-year marketing average. U.S. soybean growers have found relief in greater exports to other countries and financial aid payments from USDA's Market Facilitation Program, but global exports remain a concern for farmers and lenders. In addition, the appreciating dollar has made U.S. agricultural goods more expensive relative to competitors, which may put additional downward pressure on agricultural export volume and incomes in the near term.

Strong farmland equity has enabled farmers to restructure loans to manage operating losses and replenish working capital, keeping reported credit problems low at FDIC-insured institutions. Farmland values typically account for about 80 percent of total farm assets, making the stability of these values important to agricultural producers and their lenders. Inflation-adjusted farm real estate values in the United States nearly doubled between 2004 and 2014, a pace not seen since the farming boom of the 1970s. Despite the ongoing downturn in farm profits, farmland values have been resilient, remaining at or near 2014 peak levels through 2019. The stability in farmland values has been mainly due to low interest rates, low supply of farmland on the market, and ongoing demand for farmland.

Farmland equity is being used to restructure agriculture loans to prevent operating losses from translating to credit losses at farm banks. According to USDA, the forecasted industry average debt-to-equity ratio for 2019 is 16.1 percent, well below the 28.5 percent during the height of the 1980s farm crisis. However, if the downturn and unprofitability persist, equity could continue to dissolve and highly leveraged producers may exit the industry.

Asset quality and liquidity measures at farm banks are weakening. The median first-quarter past-due and nonaccrual (PDNA) agricultural loan ratio among farm banks increased from a low 0.13 percent at the peak of the industry's strength in 2013 to 0.77 percent in 2019, but remains well below the high of 5.92 percent reported in 1986. The increase at the 90th percentile tail of the PDNA agricultural loan ratio was more pronounced, nearly doubling from 2.85 percent in 2013 to 5.56 percent in 2019. The first-quarter agricultural loan charge-off rate also increased modestly at the tail, with the 95th percentile charge-off rate increasing from 0.01 percent in 2013 to 0.23 percent in 2019. Consistent with these trends, examiners noted a modest decline in the quality of agriculture loan credits at farm banks in 2018. Despite the current stresses, agriculture PDNA levels remain far below those reported during the 1980s farm crisis.

Farm bank liquidity has declined and funding is under pressure because of strong loan demand. The need for financing has increased because of declining net farm income, rising operational costs, and dwindling working capital, turning many farm customers from net depositors in past years to net borrowers in recent years. Loan growth at farm banks has outpaced deposit and asset growth since the downturn in the farm economy began. As a result, farm banks continue to meet agricultural credit demand at the expense of balance sheet liquidity. The median ratio of short-term liquid assets to total assets at farm banks was a record first-quarter low of 20 percent in 2019. Moreover, weak deposit growth has resulted in a growing reliance on wholesale funding that may not be available if bank conditions deteriorate.

Commercial Real Estate

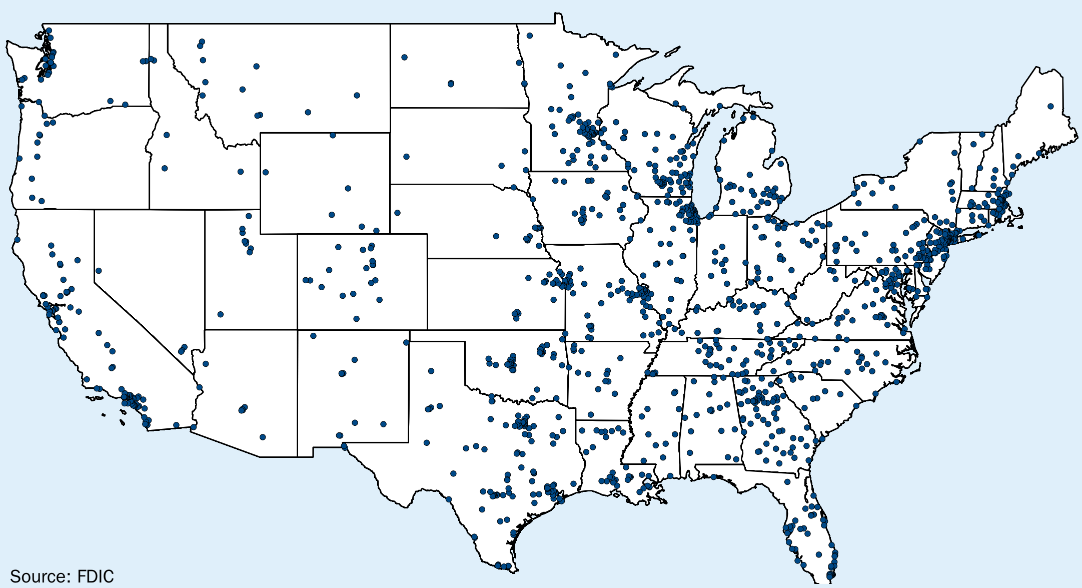
- ***Commercial real estate (CRE) market conditions remain favorable as the economic cycle matures.***
- ***Modest oversupply concerns are emerging for multifamily and industrial CRE property types, while retail CRE is facing long-term challenges related to shifts in consumer shopping behavior.***
- ***FDIC-insured institutions have grown their CRE loan portfolios, primarily with loans for existing properties rather than loans for construction and development projects.***
- ***CRE loan performance metrics at FDIC-insured institutions are strong, although institutions with CRE concentrations may be vulnerable to economic changes. Competition for quality CRE loans poses challenges for institutions operating in the CRE sector.***

During first quarter 2019, CRE loans held by FDIC-insured institutions totaled $2.4 trillion.

- Community banks hold 30 percent ($717 billion) of total CRE loans.
- Twenty-six percent of all banks hold a concentration of CRE loans above 300 percent of total capital.
- Exposure to CRE lending is concentrated in the West, Southeast, and Northeast.

Regional Exposure to Commercial Real Estate Lending

Dots on map represent banks with commercial real estate loans above 300 percent of total capital.



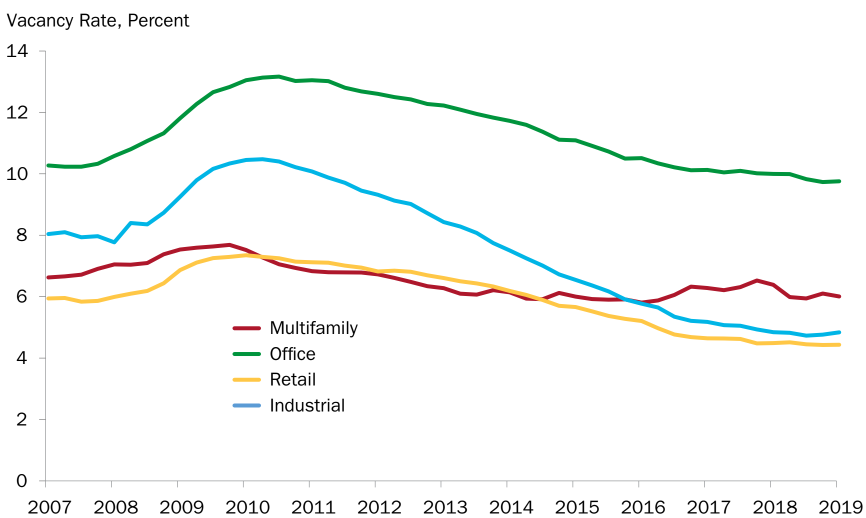
Source: FDIC

CRE conditions remain favorable as the economic cycle matures. Similar to the aggregate economy, the CRE market has enjoyed a period of expansion in recent years. However, several indicators suggest that CRE market conditions have peaked and are entering a period of moderation.

Each of the four major CRE property types—multifamily, office, retail, and industrial—have benefited from economic growth. Vacancy rates and capitalization rates remain low, while rents and property prices continue to grow (Chart 9). This relative balance of conditions accounts for a positive, but guarded, view of CRE overall. None of the four property types shows signs of distress, yet each faces strains that may be exacerbated by slower economic growth. Multifamily and industrial properties face overbuilding concerns. Certain retail properties, particularly older strip malls, are struggling with historical oversupply and changes in the ways customers shop.[18]

Modest oversupply concerns are emerging for multifamily and industrial property types, while retail faces long-term challenges related to shifts in consumer shopping behavior. Multifamily construction has been robust and may outpace demand in some markets. Apartment demand has outpaced supply for much of this cycle, following the housing market downturn during the last recession. While supply and demand conditions seem to be balanced at the national level, continued construction activity could lead to supply and demand imbalances in certain markets if the cycle slows. Several geographies have had outsized supply growth along with high and rising vacancy rates for a year or more. Primarily located in the Southeast and Southwest, these apartment markets could soften considerably if job growth slows or if interest rates rise abruptly.

Chart 9
Vacancy Rates Remain Low



Source: CoStar
Note: Quarterly data through first quarter 2019.

[18]Commercial real estate data are from CoStar, unless otherwise noted.

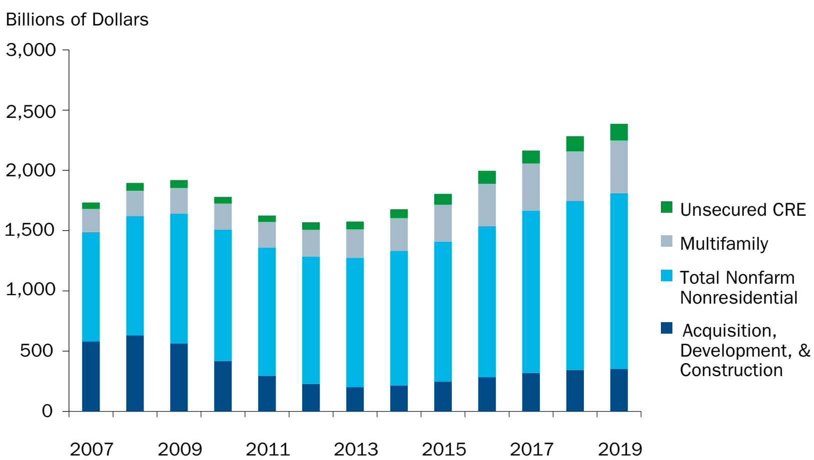
Industrial property construction also has been strong but is less likely to outpace demand. Similar to the multifamily segment, supply concerns are emerging within the industrial segment in certain geographies. Supply growth has surged, particularly in markets located along key transportation and shipping corridors. At the same time, the evolution of online shopping has boosted demand for warehouse space and facilities that serve “last-mile” delivery. Consequently, supply growth is far more widespread geographically than in the multifamily sector, and demand is keeping pace in most markets. Still, some Midwest and Northeast markets have seen large volumes of new construction and have additional growth in the construction pipeline. If economic conditions slow and demand weakens, these projects could become troubled.

Retail faces long-term challenges and is the weakest of the four major property types. The retail sector is still contending with historical oversupply that is now being exacerbated by shifting consumer preferences. Fewer customer visits to traditional brick-and-mortar stores have contributed to declining sales, which is driving the high volume of store closures. The most vulnerable retail markets are smaller markets in the Southeast and Southwest.

CRE lending at FDIC-insured institutions continues to grow, but it may be less vulnerable than in the last cycle because of the focus on existing properties rather than new construction. As of first quarter 2019, FDIC-insured institutions held almost $2.4 trillion in CRE loans, with year-over-year increases reported for the past 26 quarters (Chart 10). Although these trends have continued into 2019, growth is slowing and most of these loans are secured by existing CRE properties rather than the historically more risky ADC segment of CRE loans. As of first quarter 2019, ADC loans made up only 15 percent of CRE loans, compared with nearly 34 percent in first quarter 2007. In addition, CRE is widely held across the banking industry. CRE loans make up at least one-quarter of the loan book at more than 60 percent of both community and noncommunity banks. In contrast, ADC loans make up at least one-quarter of the loan book at less than 1 percent of both community and noncommunity banks.

In aggregate, CRE lending at FDIC-insured institutions increased during the past decade. However, the ratio of CRE loans to capital is lower today than at the height of the last cycle. The national median ratio of CRE loans to total capital was 186 percent in first quarter 2019, compared with a high of 216 percent in fourth quarter 2008. Similarly, as of early 2019, a smaller share of institutions had high concentrations of CRE loans compared with 2008. In first quarter 2019, 1,406 institutions, or 26 percent, reported a CRE concentration of 300 percent or more of total capital, down from 36 percent in fourth quarter 2008. Still, nearly one-third of noncommunity banks and more than one-quarter of community banks held CRE concentrations of 300 percent or more.

Chart 10
CRE Lending at FDIC-Insured Institutions Continues to Grow



Source: FDIC
Note: Data as of first quarter of each year.

The CRE sector and institutions with concentrations in loans to the CRE sector have been vulnerable to changes in the economic cycle. Findings from the 2012 FDIC Community Banking Study show that community banks specializing in CRE lending failed more than twice as often as the average community bank.[19] Leading up to the financial crisis, many community banks exhibited a higher risk appetite and many failed or experienced a ratings downgrade. High construction loan concentrations and rapid asset growth proved damaging when coupled with weak risk management practices and inadequate capital levels.

Competition for quality CRE loans poses challenges for institutions operating in the CRE sector. In aggregate, banks have been regaining market share of CRE loans outstanding after a decline during the financial crisis. However, competition for quality CRE loans can pressure institutions to ease terms, loosen underwriting standards, or make policy exceptions. Examiners report that the majority of CRE-focused lenders have stable CRE risk profiles and are in satisfactory condition. Nonetheless, since mid-2017, examiners have noted opportunities for CRE risk management improvement, most commonly in the areas of board and management oversight, portfolio sensitivity analysis, portfolio management, and, to a lesser degree, loan underwriting.

Despite competitive pressure, CRE loan performance metrics at FDIC-insured institutions remain strong. Total past-due and nonaccrual CRE loans are at their lowest levels in nearly a decade after declining year-over-year for nine consecutive years. The median delinquency rate for CRE loans among all U.S. institutions fell to 0.51 percent in first quarter 2019, well below the levels leading into the last recession. All regions of the United States had median CRE past-due and nonaccrual rates below 1 percent as of first quarter 2019. Banks in the Southeast continue to report the highest median CRE delinquency rate (0.67 percent in first quarter 2019), but the rate remains well below the area's recent high of 6.80 percent in 2011.

[19] FDIC Community Banking Study, December 2012, 5–13, https://www.fdic.gov/regulations/resources/cbi/report/cbi-full.pdf. The study covers the period from 1984 to 2011.

Energy

- ***Oil and gas supply and demand fundamentals, as well as macroeconomic and geopolitical factors, are contributing to energy market volatility.***
- ***Banks with energy sector exposures continue to be resilient into 2019 despite oil price declines.***
- ***High-yield debt linked to the energy sector continues to grow and could be vulnerable in another industry downturn.***

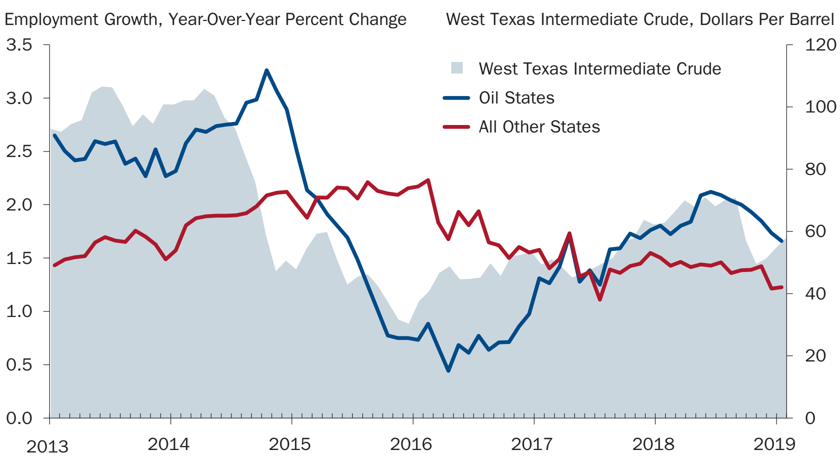
Economic exposure to the energy sector is concentrated in eight states with oil-reliant economies: Alaska, Colorado, Louisiana, New Mexico, North Dakota, Oklahoma, Texas, and Wyoming.

- Direct bank loans to the energy sector are primarily held at a small number of large and regional banks.
- Exposure to the energy sector is focused in the South.

Domestic oil production reached a record high in late 2018, and economic growth in oil-reliant economies is strong. However, the oil industry remains vulnerable to volatility that produced past boom and bust cycles. Oil prices declined more than 40 percent in less than three months in late 2018, following record production and concerns about slowing global economic growth. While this price decline did not result in a widespread slowdown of the national economy, economic growth in oil-reliant states decelerated.

Eight states—Alaska, Colorado, Louisiana, New Mexico, North Dakota, Oklahoma, Texas, and Wyoming—accounted for more than three-fourths of the nation's oil output in December 2018. The oil economy is closely tied to these state economies, directly and indirectly. In 2018, job growth in the oil states outpaced job growth in other states but slowed markedly in the second half of the year as oil prices declined (Chart 11). This slowdown was less severe than the one in 2014 and 2015 when oil prices also fell. Because oil supply and demand fundamentals are affected by many different variables—including technical, political, macroeconomic, and geopolitical—the probability of continued volatility in this industry remains high, and the impact on oil-concentrated states will likely persist.

Chart 11
Oil Prices Are an Important Economic Driver for Oil-Producing States



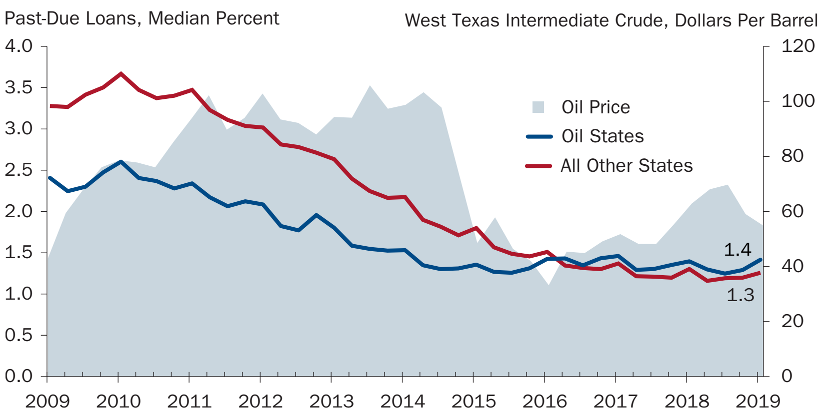
Sources: Bureau of Labor Statistics and U.S. Energy Information Administration
Notes: Oil states include Alaska, Colorado, Louisiana, New Mexico, North Dakota, Oklahoma, Texas, and Wyoming. Quarterly data through first quarter 2019.

Banks in oil-concentrated areas remain resilient to oil price volatility. Examination findings show that only a handful of FDIC-supervised banks, concentrated in the FDIC's Dallas Region, have more than 25 percent of loans tied directly to oil and gas lending.[20] Oil exploration and production (E&P) operations today are more capital intensive and beyond the lending capacity of many community banks. Credit deterioration resulting from low oil prices has been relatively mild. At first quarter 2019, the past-due loan rate for oil-reliant states was 1.4 percent, only slightly above the 1.2 percent rate for all other states (Chart 12). Few banks in oil- and gas-concentrated areas exhibited severe stress, and no bank failures occurred in the concentrated areas during the recent period of low oil prices.[21]

Credit deterioration was pronounced in oil and gas loan portfolios at larger banks following the price declines of 2014 and 2015, but it has since moderated. In 2014, Shared National Credit (SNC) reviews reported that $6.9 billion of oil and gas credits were classified, an amount that represented 3.6 percent of total SNC classified loans.[22] The volume peaked in 2016 at $77 billion. Minor improvement was reported in 2017, but problem oil and gas credits still accounted for 26.5 percent of all SNC classifications that year.[23] In 2018, conditions in the energy sector had improved enough that oil and gas credits were not reported in the SNC reviews.

Chart 12

Community Banks in Oil-Concentrated States Proved Highly Resilient to the Rapid and Severe Decline in Oil Prices



Sources: FDIC and Energy Information Administration
Notes: Includes all community banks, as defined by the December 2012 FDIC Community Bank Study. Oil states include Alaska, Colorado, Louisiana, New Mexico, North Dakota, Oklahoma, Texas, and Wyoming. Quarterly data through first quarter 2019.

[20] Lisa A. Garcia and Kenneth A. Weber, "Oil Price Volatility and Bank Performance: A View from the Supervisory Process," FDIC Supervisory Insights 15, no.1 (Summer 2018): 3–14.

[21] Ibid.

[22] Loans that are special mention and classified are considered non-pass loans. See "Shared National Credits Program 2015 Review," November 2015.

[23] "Shared National Credits Program 2015 Review, 3rd Quarter 2016 / 1st Quarter 2017 Examinations," August 2017.

Low oil prices have had a substantial effect on high-yield energy debt markets. The evolution of E&P financing helps explain why banks have less direct credit exposure and a smaller share of the E&P debt market. For the past several years, the energy industry recorded the largest share of high-yield debt, and that share continues to grow. According to Fitch Ratings, the energy sector accounted for less than 6 percent of the issued high-yield debt in 2000. By 2018, the energy sector accounted for 15.5 percent of high-yield debt. The default rate for high-yield energy debt declined in 2018 to 2.4 percent, significantly below the 2016 peak of 18.8 percent and below the 2001 to 2018 annual average of 4.0 percent.

Prospects for E&P firms improved in 2019, but oil market volatility remains a risk. Firms continued to achieve lower break-even prices, as production efficiencies increased and firms' financial performance improved. Many E&P firms expanded operations in 2018 and funded increased capital expenditures with debt issuance and C&I loans. C&I lending, which was the fastest-growing portfolio segment for banks in top oil-producing states in 2018, sustained that pace in first quarter 2019, likely due to overall economic growth and demand for business loans linked to the oil and gas sector.

Housing

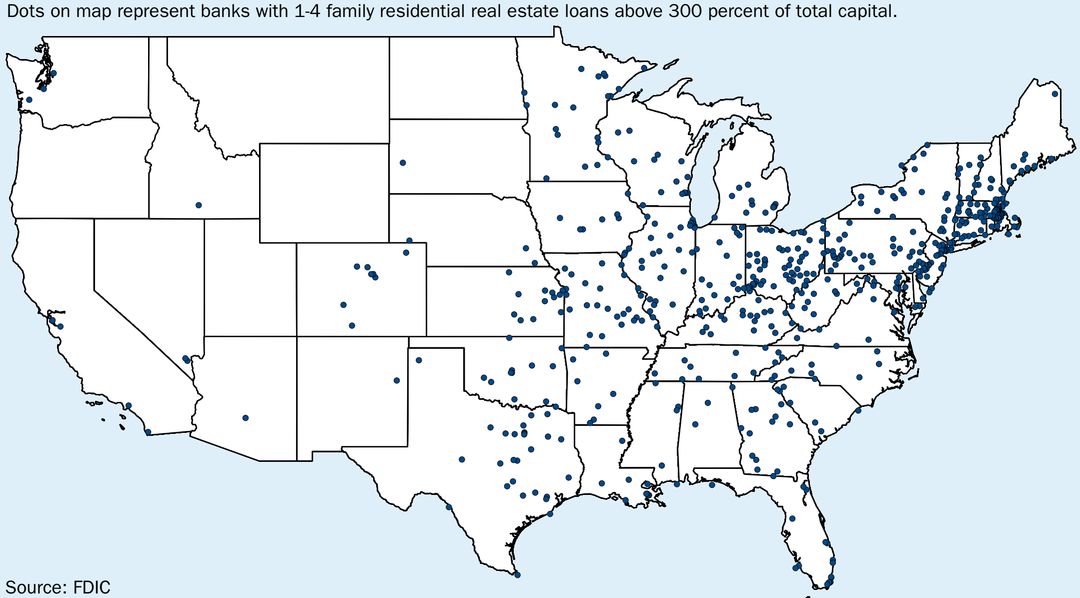
- ***Signs of a slowdown in sales are emerging in the housing market even as house prices continue to rise across most of the nation.***
- ***Affordability is a growing concern as income growth lags the rise in house prices and mortgage payments.***
- ***Among FDIC-insured institutions, the condition of the residential mortgage portfolio is favorable, but some banks report significant loan concentration levels and increased competition.***

During first quarter 2019, 1–4 family residential loans held by FDIC-insured institutions totaled $2.1 trillion.

- Community banks hold 19 percent ($399 billion) of total 1–4 family residential loans.
- Twelve percent of all banks hold a concentration of 1–4 family loans above 300 percent of total capital.
- Exposure to 1–4 family residential lending is concentrated in New England.

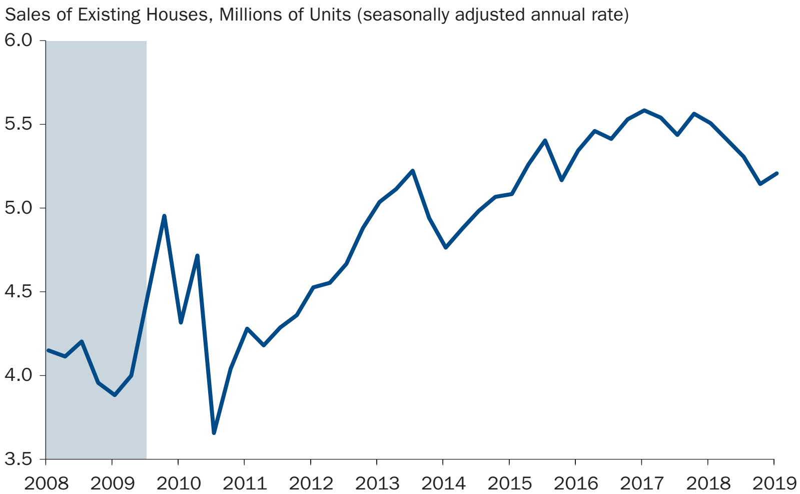
Regional Exposure to 1-4 Family Residential Real Estate Lending

Dots on map represent banks with 1-4 family residential real estate loans above 300 percent of total capital.



Source: FDIC

Chart 13
Home Sales Have Fallen



Source: National Association of Realtors (Haver Analytics)
Notes: Quarterly data through first quarter 2019. Recessions shaded.

Signs of a slowdown are emerging in the housing market. As the broader economy recovered from the Great Recession, forward-looking measures of housing market activity, including home sales and new residential construction, slowly recovered. At the same time, house prices increased sharply from cyclical lows. Housing market activity lost momentum in 2018 as low inventory and higher mortgage rates reduced the pace of growth. Lenders reported weaker demand for residential mortgages. Nationally, home sales in 2018 declined from a year earlier and were well below the cyclical high as of first quarter 2019 (Chart 13). A weak existing home sales market was primarily responsible for the lower sales volume, but sales of new residential construction also slowed. The confluence of these factors led to a decline in home builder confidence, reflecting concerns about the softening sales environment.

Several factors contributed to the decline in home sales during 2018. Housing demand slowed as prices increased and houses became less affordable. Rising mortgage rates in 2018 also contributed to a slower pace of home sales. Federal tax law changes limiting housing-related tax deductions that went into effect in 2018 also may have contributed to slower home sales, particularly in regions with higher property values and higher property taxes.[24] In addition, the historically low supply of homes available for sale restrained sales volumes.

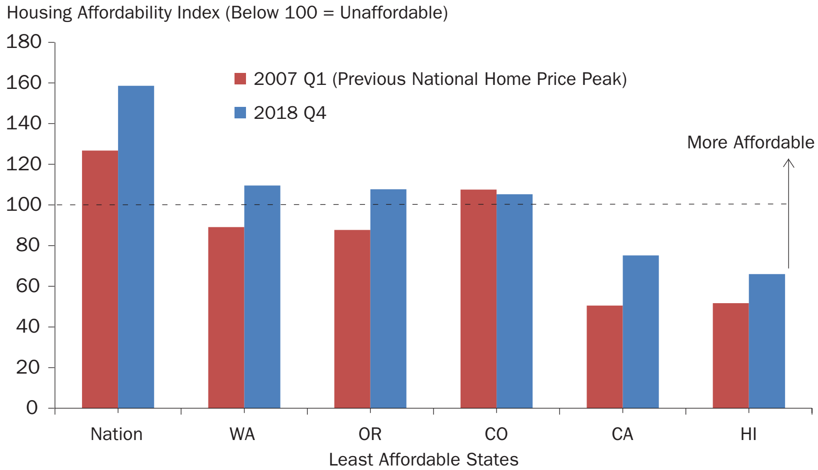
Deteriorating housing affordability is a risk for the housing market. As the housing market recovered from the Great Recession, house price appreciation exceeded income growth. Lower mortgage rates during much of the current cycle mitigated some of the disparity between home price and homebuyer income growth. However, rising mortgage rates weighed on affordability until the recent mortgage rate retreat.

Affordability is a particular concern in markets where home prices are high or have risen more quickly than income levels. As of fourth quarter 2018, single-family residential properties in California and Hawaii were the least affordable in the nation (Chart 14). At the local level, the least affordable metro areas are also primarily located in these two states, with the San Francisco Bay Area having the least affordable homes in the nation. While home affordability levels in these metros have generally not reached the extremes of the previous housing boom, they have trended well below long-term median levels. A similar trend has occurred in many other metros across the country. As affordability levels continue to deteriorate, demand for housing may slow.

[24] Richard Peach and Casey McQuillan, "Is the Recent Tax Reform Playing a Role in the Decline of Home Sales?," Federal Reserve Bank of New York, April 15, 2019.

Chart 14

Housing Affordability Remains Above Pre-Recession Levels, Despite Recent Declines



Sources: National Association of Realtors, Census Bureau, Bureau of Economic Analysis, and Moody's Analytics
Notes: Data as of fourth quarter 2018. National number is aggregate of states by Moody's.

Community banks report improved loan performance in residential mortgage loan portfolios, but these institutions face increasing competition. Since peaking in 2010 at nearly 3 percent, the median total past-due residential mortgage loan rate among all community banks declined to 1.26 percent in first quarter 2019. A similar trend has been evident across regions. By first quarter 2019, median residential mortgage past-due rates had declined noticeably and ranged from 0.26 percent in San Francisco to 1.60 percent in Atlanta.

In first quarter 2019, community banks reported a median residential mortgage loan growth rate of 2.85 percent. This figure has been relatively unchanged over the past several quarters but is down considerably from the 9 percent peak in 2008. Residential lending tends to be more robust in metro areas. Community banks headquartered in a metro area reported residential loan growth of 3.4 percent in first quarter 2019. This rate compares to 2.4 percent for banks in a non-metro area. On a regional basis, residential loan growth among community banks was fastest in the New York, Atlanta, and Dallas Regions in first quarter 2019.

Banks face competitive pressures from nonbanks as nonbank residential mortgage originators continue to gain significant market share. Such competitive pressures could shift risks within the financial industry and cause the overall level of risk to increase.

Banks generally maintain more conservative residential mortgage underwriting practices relative to nonbanks, in large part because of compositional differences. For example, FDIC analysis of Home Mortgage Disclosure Act data shows that banks (primarily the largest banks) significantly reduced Federal Housing Administration (FHA) lending in the post-crisis period, and nonbanks have filled the gap. FHA loans typically have higher loan-to-value ratios, and FHA borrowers typically exhibit lower credit scores and higher debt-to-income ratios relative to borrowers seeking conventional conforming or jumbo mortgages.

Competition from nonbanks and the slowing conditions in the housing market could induce banks to ease historically tight underwriting standards for residential mortgage loans as they reach for growth in their lending portfolios. According to the Federal Reserve Senior Loan Officer Opinion Survey on Bank Lending Practices, the share of respondents that reported easing in underwriting standards for residential real estate lending rose in late 2018.[25]

[25] The Senior Loan Officer Opinion Survey on Bank Lending Practices is conducted by the Board of Governors of the Federal Reserve System. The current reporting panel consists of up to 80 large domestically chartered commercial banks and up to 24 large U.S. branches and agencies of foreign banks. See https://www.federalreserve.gov/data/sloos/about.htm for more information on the April 30, 2019, survey.

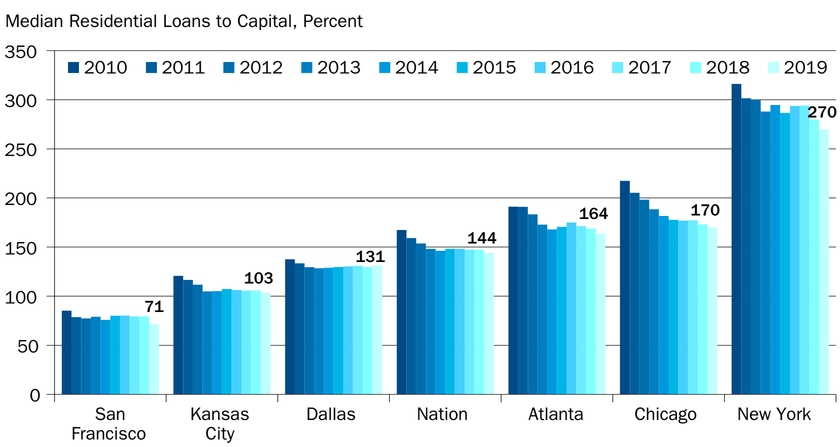
In addition, as signs of a housing market slowdown are emerging, a sizable share of banks surveyed reported weaker demand for residential mortgages through early 2019. According to the FDIC Credit and Consumer Products/Services Survey, which includes mostly small FDIC-supervised banks, examiners report that residential mortgage loan underwriting practices for most banks are average, while the level of risk for the loan product remains low.[26]

Residential mortgage loan concentrations have declined from post-crisis peaks but remain elevated in some areas of the country, particularly in New England, which is in the FDIC's New York Region (Chart 15). New England traditionally has had a large number of mutual savings banks that focus on residential mortgage lending, and these institutions fared well during the financial crisis. The nation's community banks reported median residential mortgage loan concentrations of 144 percent of total capital in first quarter 2019. This figure is relatively unchanged from one year earlier but is down from the post-crisis peak of 169 percent in fourth quarter 2009. Fourteen percent of community banks reported residential mortgage loan concentrations above 300 percent of total capital in first quarter 2019. A majority (62 percent) of community banks with significant concentration levels above 300 percent are headquartered in metro areas, consistent with loan growth trends.

Exposure to the residential mortgage market is highest among banks headquartered in New England. In this area, the concentration of mortgage loans to total capital was 358 percent in first quarter 2019, down from 429 percent during the crisis in 2008 but well above all other areas of the country. Sixty-five percent of all community banks in New England report a concentration level above 300 percent of total capital, also the highest among all regions.

Chart 15

Residential Mortgage Loan Concentrations Are Below Post-Crisis Peaks but Remain Elevated Among Community Banks in Some Regions



Source: FDIC
Note: First quarter data each year for community banks only.

[26]The Credit and Consumer Products/Services Survey is completed by FDIC risk management examiners at the conclusion of each risk management examination. The survey is a valuable tool to identify and track emerging products and services, and to identify potential risks. Information referenced in this report is from surveys completed as of December 31, 2018.

Leveraged Lending and Corporate Debt

- ***Total nonfinancial corporate debt is at a record high share of GDP.***
- ***The share of corporate debt in capital markets, such as corporate bonds and syndicated institutional leveraged loans, has grown.***
- ***Corporate bonds and leveraged loans have become increasingly risky, as the share of low-rated bonds has grown and lender protections in leveraged loans have deteriorated.***
- ***Direct bank exposure to corporate debt risks is concentrated in funded and unfunded revolving leveraged loans, traditional C&I loans, and mortgages, while indirect exposures are opaque.***

Collateralized Loan Obligations (CLOs) held by banks are one source of bank exposure to the leveraged lending market. As of the first quarter of 2019, 16 percent ($96.0 billion) of U.S. CLOs were held by U.S. banks.[27]

- Large banks with more than $250 billion in assets accounted for 85 percent ($81.9 billion) of reported U.S. bank CLO holdings.

Nonfinancial corporate debt levels are at all-time highs, driven by growth in corporate bonds and leveraged loans.[28] U.S. interest rates have remained low for more than a decade after falling to near zero in the aftermath of the 2008 financial crisis. Partly in response to these low rates, corporations have taken on an increasingly large volume of debt. Nonfinancial corporate debt reached 46.9 percent in 2018—a record high relative to GDP (Chart 16).[29] Corporate bonds and syndicated leveraged loans have grown far faster than other types of corporate debt, such as mortgages and traditional C&I bank loans, with outstanding institutional leveraged loans nearly doubling since 2008. Most of the increase in corporate debt outstanding in 2018 was due to a sharp increase in loans held by nondepository institutions, including a 20 percent increase in leveraged loans.[30] Growth in leveraged loans has slowed moderately in 2019.

Corporate bonds are the largest portion of corporate debt. Most of the rapid growth in bonds since 2008 has occurred in the lowest-rated investment-grade categories. The share of bonds rated BBB,[31] the lowest investment-grade category, was 49 percent of all investment-grade bonds in 2018, up from 33 percent in 2008.[32] This category of debt presents a source of risk because should these borrowers encounter challenges, some could be downgraded to high-yield or "junk" status. These "fallen angels" would then face higher borrowing costs, and their downgrade could disrupt the high-yield credit market. The current volume of BBB-rated bonds is nearly three times as large as the entire high-yield market, so borrowing costs could rise for other high-yield borrowers if the market struggles to absorb the new supply. Also, the amount of high-yield bonds that some types of investors (for example, mutual funds and pension funds) can hold is often restricted, which could lead to a wave of forced selling in the event of significant downgrades.

[27] The Call Report items used to estimate bank CLO holdings are only reported for banks with at least $10 billion in assets.

[28] Nonfinancial corporate debt refers to debt obligations of nonfinancial corporations.

[29] Federal Reserve Board and Bureau of Economic Analysis.

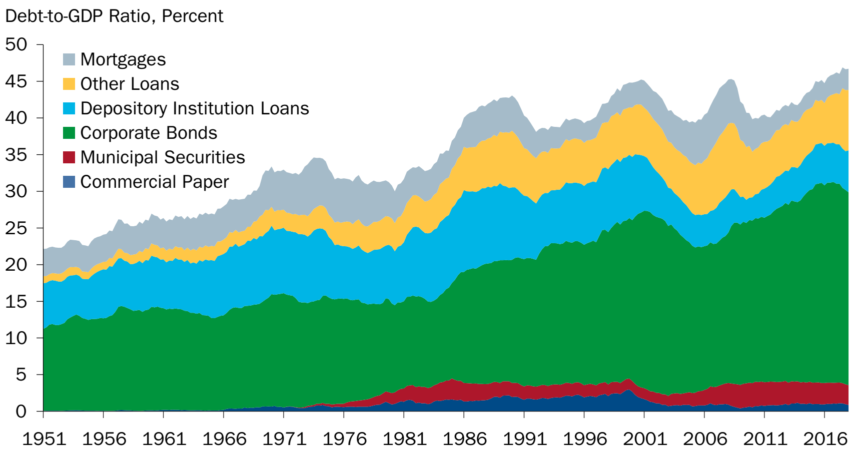
[30] Data on the increase in loans held by nondepository financial institutions are from the Federal Reserve Board, and data on the increase in leveraged loans are from S&P Leveraged Commentary and Data (LCD).

[31] "BBB" is on the scale used by credit rating agencies S&P and Fitch. Moody's, the other major credit rating agency, uses the rating "Baa" for this category of credit risk.

[32] ICE Data Services.

Chart 16

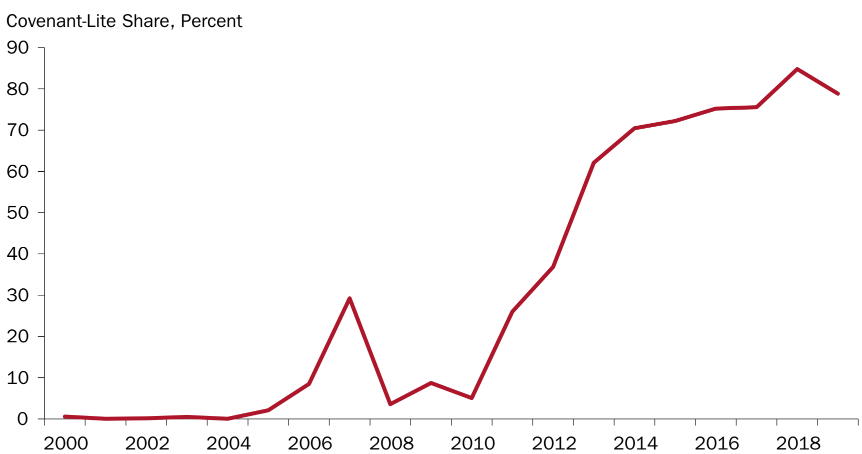
Nonfinancial Corporate Debt-to-GDP Is Elevated, Driven by an Increase in Corporate Bonds



Sources: Federal Reserve Board and Bureau of Economic Analysis (Haver Analytics)

Chart 17

The Share of Leveraged Loans Lacking Strong Protective Covenants Has Risen Sharply Since 2008



Source: S&P LCD
Note: Covenant-Lite share is of total issuance of institutional leveraged loans.

Investors reaching for yield have increasingly funded leveraged loans to highly indebted companies that lacked traditional lender protections. Syndicated leveraged loans have typically contained provisions called "maintenance covenants," which require the borrower to meet certain financial and performance metrics to remain in good standing on their loan. These covenants protect lenders from deterioration in borrower performance. Since 2010, leveraged loans have increasingly been issued without these protections.[33] These loans are referred to as "cov-lite."

The share of newly issued cov-lite institutional leveraged loans rose from less than 10 percent in 2010 to about 85 percent in 2018 (Chart 17). The cov-lite share of leveraged loans declined slightly to 79 percent in 2019 but remains well above the pre-2018 period. Other aspects of leveraged loans have also become riskier. Leverage levels have risen to all-time highs, while loss-absorbing subordinated debt has largely disappeared.[34] Reported leverage may also understate actual leverage, as earnings are now routinely inflated through earnings "add-backs" to account for expected increases in revenues or expected decreases in costs, which may not materialize. These add-backs increase the projected earnings used to calculate leverage ratios above the level of current earnings, making the borrower seem less leveraged and potentially allowing the borrower to obtain more preferential loan terms. These factors are likely to lead to lower recoveries and a more drawn-out default cycle if borrowers begin to have difficulty servicing their debt.[35]

Direct bank exposure to corporate debt is concentrated in revolving leveraged loans, CLOs, traditional C&I loans, and commercial mortgages, while indirect exposures are opaque and could transmit stress from the corporate sector into the banking system. Banks do not hold a significant amount of corporate bonds, so stress in the corporate bond market is unlikely to affect banks directly.[36] In the leveraged loan market, banks historically have been among the primary holders of institutional term leveraged loans. However, while U.S. banks continue to arrange and originate almost all of these loans, they have significantly trimmed their holdings. U.S. banks' share of these loans was 7.3 percent in the first half of 2019, up from 2018 but down significantly from more than 25 percent in 2000.[37] CLOs and loan mutual funds have grown to fund the vast majority of institutional leveraged loans over the past two decades, reaching about 75 percent in 2019. Banks hold portions of CLOs, which expose banks to risks in the underlying leveraged loans. In early 2019, banks held more than $95 billion in CLOs, down moderately from the peak of $105 billion in 2016 but well above the $38 billion held in 2010.[38] Banks also are the primary source of funding for the revolving "pro rata" portion of the loans. Many of these revolving credits are likely undrawn, but borrowers could draw on these revolving lines before default should they face distress.[39]

Banks have other indirect exposures to corporate debt. Bank lending to nonbank financial firms (such as CLO arrangers and direct leveraged lenders) and their participation in derivatives markets (for example, total return swaps) can expose banks to risks in corporate debt markets. Bank-sponsored or affiliated funds with exposures to corporate debt or leveraged loans represent another potential source of exposure, as banks have felt compelled to step in and support their related funds during times of stress. Banks also are exposed to stress in corporate debt markets through macroeconomic effects such as slowing growth or rising unemployment. These factors could affect the performance of other bank loans, such as residential and commercial mortgages and C&I loans to small businesses.

[33] All data on leveraged loans are from S&P LCD.

[34] Leverage is measured as Debt/EBITDA and is higher than at any point since at least 2001 according to the first quarter 2019 S&P LCD Quarterly Leveraged Lending Review.

[35] Moody's Investor Service, "Convergence of Bonds and Loans Sets Stage for Worse Recoveries in the Next Downturn," August 16, 2018.

[36] FDIC.

[37] S&P LCD.

[38] The Call Report line item for these data is labeled structured financial products. However, experience indicates that this line item is primarily CLOs.

[39] The first and third quarter 2018 Shared National Credit (SNC) Program examinations showed that less than half of SNC commitments were outstanding. This is only indicative, as not all loan commitments in the SNC program are leveraged loans.

Nonbank Financial Institution Lending

- ***Banks are exposed, directly and indirectly, to nonbanks. This includes direct lending to nonbank financial institutions.***
- ***Bank lending to nonbank financial institutions has expanded seven-fold since 2010 and exceeds $400 billion.***

During first quarter 2019, loans to nondepository financial institutions held by FDIC-insured institutions totaled $414 billion.

- Community banks hold less than 1 percent ($10 billion) of total loans to nondepository financial institutions.
- The four largest noncommunity banks hold about half (49 percent) of all loans outstanding to nondepository financial institutions.

By lending to nonbank financial institutions, banks are accruing direct and indirect exposures to those institutions and to the risks inherent in the activities and markets in which they engage. FDIC analysis of Call Report data indicates that bank lending to nonbank financial institutions has expanded seven-fold since 2010 and now exceeds $400 billion (Chart 18). The largest banks are responsible for most of this lending, as the four largest banks reported 49 percent of all loans outstanding to nonbank financial institutions as of first quarter 2019.

Lending to nonbank financial institutions includes loans to nonbank mortgage lenders and other nonbanks that do not primarily make loans, including private equity funds and real estate investment trusts. Outside of the loans extended by the four largest banks, supervisory experience indicates that most loans to nonbank financial institutions are to nonbank mortgage lenders or mortgage-backed securitizers. Through these loans, banks retain exposure to many of the loans that have shifted to nonbanks.

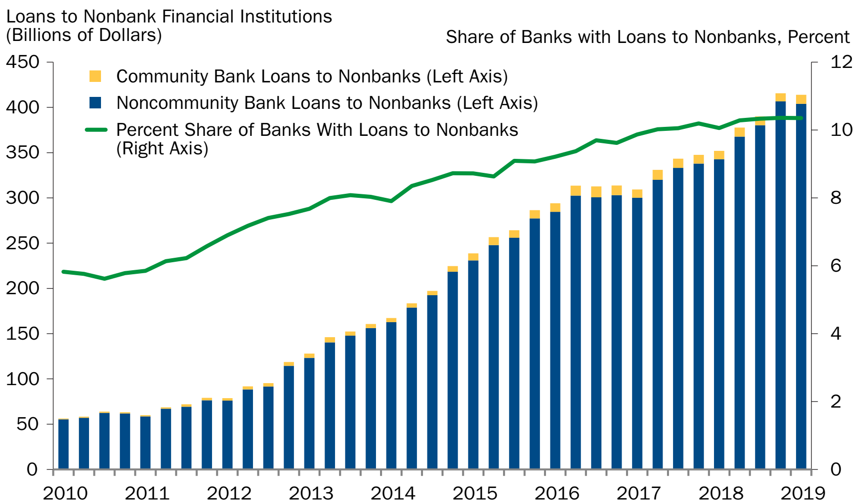
While loans to nonbanks have grown steadily since 2010, the volume of loans outstanding in first quarter of 2019 contracted slightly from year-end 2018. Overall, loans to nonbank financial institutions account for less than 5 percent of total loans and leases reported by banks as of first quarter 2019, and less than 11 percent of all banks are engaged in this type of lending. While the total exposure remains small, lending to nonbanks could be risky because it is relatively untested in an economic downturn. It also indirectly expands the exposure of an institution to the lending activity of the nonbank. These activities include portfolio categories that have been historically risky, such as CRE.

Most of the funding that has supported increased nonbank engagement in mortgage origination and servicing activities is provided by banks through warehouse lines of credit. While these lines of credit can be a source of significant losses to banks, as they were during the financial crisis, they generally are considered relatively low risk because they are typically overcollateralized and subject to frequent monitoring. Ultimately, warehouse lines of credit to nonbank mortgage lenders directly expose banks to the liquidity and funding risks of nonbanks.

The measure of bank lending to nonbank financial institutions on the Call Report does not capture the entirety of bank exposure to nonbanks, including exposure to corporate bond and loan markets. As the section in this report on Leveraged Lending and Corporate Debt describes, direct bank exposure to corporate debt is concentrated in revolving leveraged loans, traditional C&I loans, CLOs, and commercial mortgages. Indirect exposures to corporate debt are opaque and could transmit credit risk and stress from the corporate sector into the banking system.

Chart 18

Driven by Noncommunity Banks, Bank Lending to Nonbank Financial Institutions Now Exceeds $400 Billion



Source: FDIC

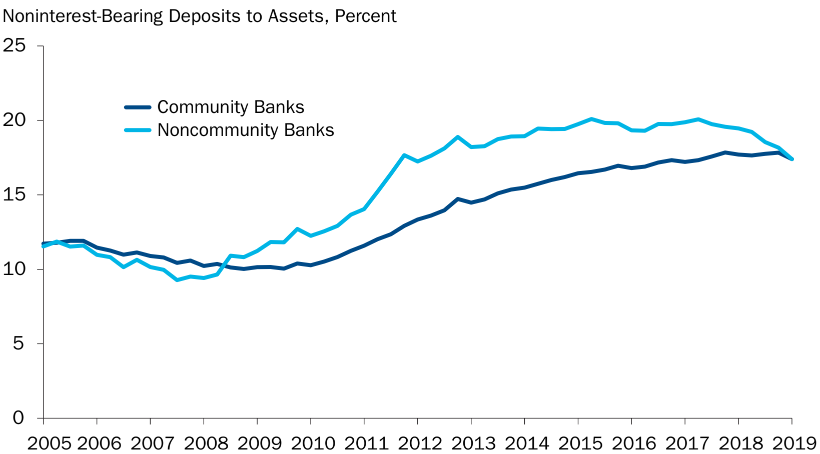
Note: Quarterly data through first quarter 2019.

Interest Rate Risk and Deposit Competition

- ***Rising interest rates and competitive pressures are headwinds to deposit growth.***
- ***Rising rates and deposit competition have begun pushing deposit costs higher and are affecting the mix of deposits, particularly at noncommunity banks.***
- ***Most banks continue to report net interest margin growth, but banks with rising funding costs and a high proportion of long-term assets may face near-term margin pressure.***

Chart 19

Deposit Composition Is Just Beginning to Shift Back Toward Interest-Bearing Balances, Despite Years of Interest Rate Increases



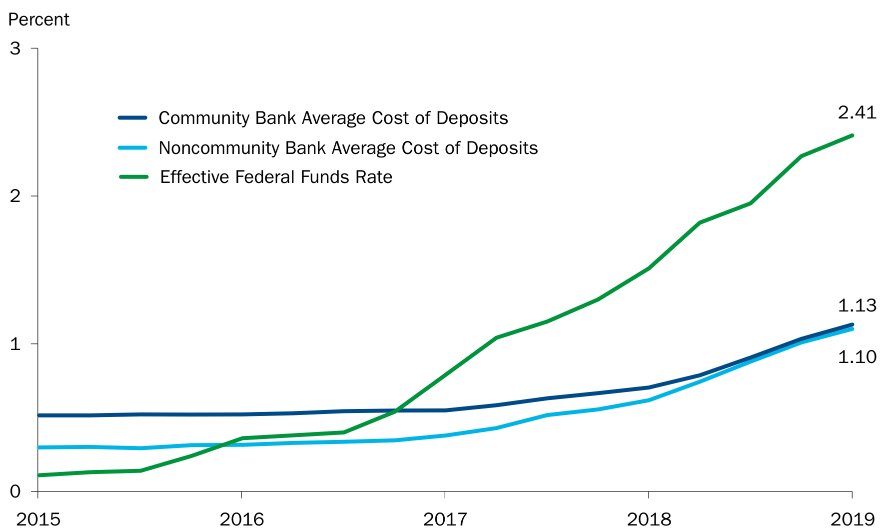
Sources: FDIC and Federal Reserve of St. Louis
Note: Quarterly data through first quarter 2019.

Banks have enjoyed years of abundant low-cost deposit funding in the aftermath of the Great Recession. While the Federal Reserve held the effective federal funds rate below 20 basis points between 2008 and 2015, FDIC-insured institutions reported an influx of low-cost deposits. Between December 2007 and June 2015, noninterest-bearing deposits as a share of assets doubled from 9.7 percent to 19.6 percent, giving banks ample low-cost funding to support loan growth. Noncommunity banks were the greatest beneficiaries of the changing deposit mix, reporting a 10.6 percentage point increase in noninterest-bearing deposits to total assets compared with an increase of 6.0 percent for community banks. Interest-bearing deposit costs for the industry reached a new reported low of 33 basis points in third quarter 2015.

After a delayed response to the rising interest rate cycle that began in fourth quarter 2015, banks have begun to see a shift toward higher interest-bearing deposits and rising funding costs. After experiencing outsized growth in noninterest-bearing deposits, noncommunity banks have started to report faster growth in interest-bearing deposits (Chart 19). The noninterest-bearing deposits to total assets ratio for noncommunity banks peaked in second quarter 2017 and declined 2.7 percentage points through first quarter 2019. Community banks have reported a plateau in their share of noninterest-bearing deposits to total assets, which grew at a more gradual rate than at noncommunity banks throughout the low interest rate period from 2008 to 2015.

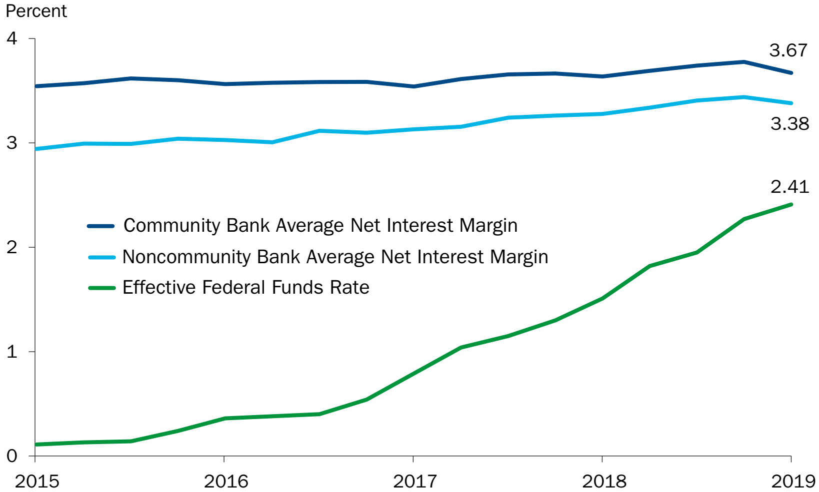
The cost of interest-bearing deposits has increased at both community and noncommunity banks since 2015 (Chart 20). Noncommunity banks reported a 79 basis point increase in interest-bearing deposit costs since December 2015, while community banks reported an increase of 61 basis points. Historically, community banks have relied more on deposits for funding than noncommunity banks, and they competed with those institutions for deposits by offering higher deposit rates. Now, with comparable deposit rates, community banks are in tighter competition with noncommunity banks, which tend to offer greater technological and network services than community banks. This competition could create added pressure for community banks to raise rates in order to avoid deposit attrition. In turn, the deposit mix could shift from noninterest-bearing to interest-bearing deposits, similar to the situation at noncommunity banks, which may compound the negative effect of higher interest rates on NIMs.

Chart 20
Noncommunity Banks Report a More Rapid Increase in Their Cost of Interest-Bearing Deposits Than Community Banks



Sources: FDIC and Federal Reserve of St. Louis
Note: Quarterly data through first quarter 2019.

Chart 21
Noncommunity Banks Report a More Rapid Increase in Their Yield on Assets and Therefore Stronger NIM Growth



Sources: FDIC and Federal Reserve of St. Louis
Note: Quarterly data through first quarter 2019.

Increased competition for deposits has not yet significantly affected aggregate net interest margins. Banks have increased their yields on earning assets enough that NIMs have generally continued to grow, despite rising deposit costs. Noncommunity banks, which typically have shorter asset durations, have seen their asset yields and NIMs increase more than community banks, narrowing the gap in NIM between the two groups (Chart 21). As is typical in the first quarter of a year, both community and noncommunity banks reported a slight seasonal decline in NIM in first quarter 2019. While the first quarter decline was larger than in recent years, it is in line with historical values. While funding costs have been rising, 2,043 banks have seen their asset yields decline, putting further downward pressure on NIMs (Table 1). Second quarter NIM figures will help shed light on whether a broader shift is occurring in NIM trends.

More than one-quarter of FDIC-insured institutions reported a 5 basis point or greater decrease in full-year NIMs from December 2015 to December 2018 (Map 3). The Midwest and Northeast have the highest share of banks reporting this decline. Increasing deposit pricing pressures and downward pressure on asset yields are a headwind to NIMs. Institutions whose NIMs are most at risk are those that increased the share of long-term assets on their balance sheets in search for higher yields during the low-for-long interest rate environment of 2008 to 2015.

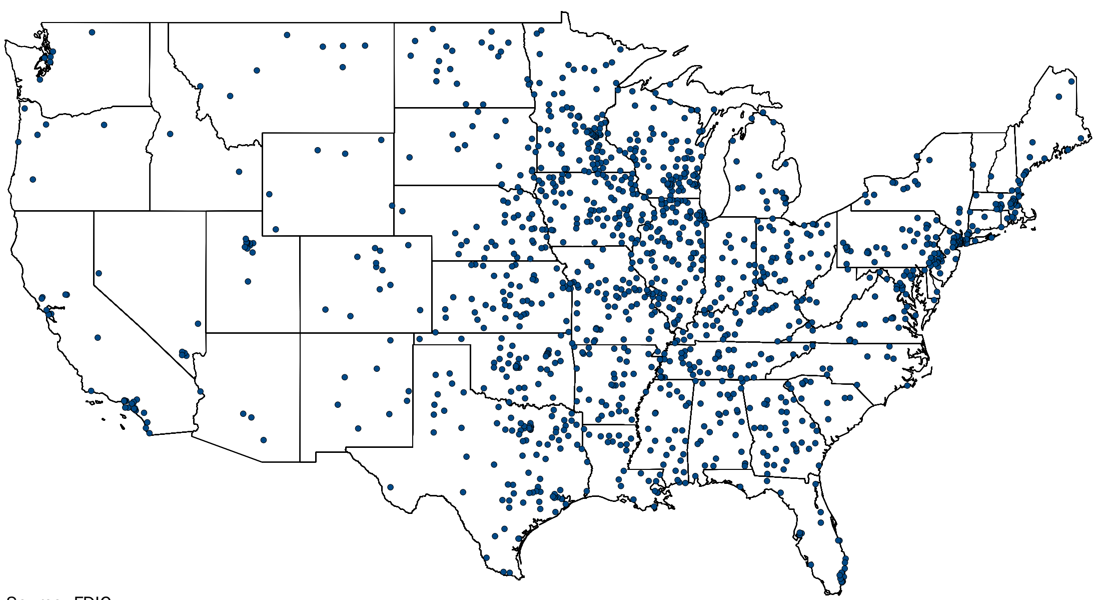
Table 1
Count of Banks by Total Asset Size

Decline in Loan Yield 9/30/15 to 12/31/18					
Basis Points	Over $100 Billion	$10 Billion to $100 Billion	$1 Billion to $10 Billion	Under $1 Billion	Total
0 to 10 Decline	0	5	54	489	548
10 to 50 Decline	0	11	87	1,061	1,159
50 to 100 Decline	0	5	22	213	240
Over 100 Decline	0	0	12	84	96
Total	0	21	175	1,847	2,043

Source: FDIC

Map 3
The Midwest and Northeast Have Highest Share of Banks Reporting NIM Compression

Dots on map represent banks with more than a 5 basis point decline in NIM between 2015 and 2018.

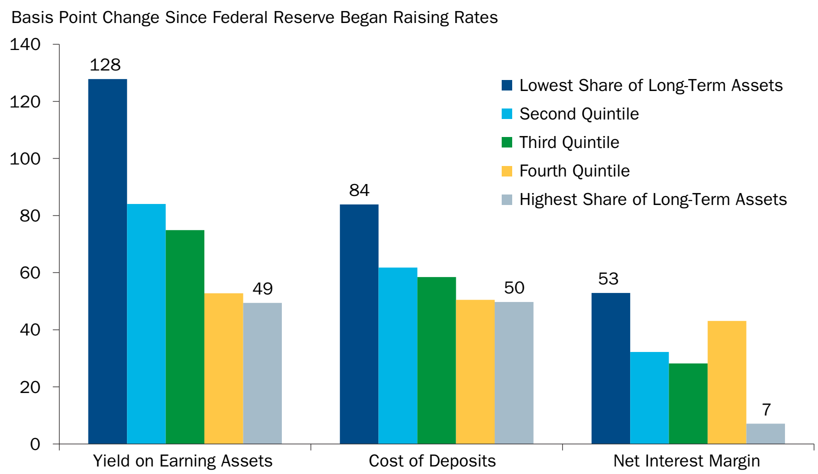


Source: FDIC

Institutions with the highest share of long-term assets saw this strategy pay off during the low interest rate years. They reported stronger NIMs compared to banks with a lower proportion of long-term assets. Since the Federal Reserve began raising interest rates in December 2015, however, their yields have suffered from the relative rate insensitivity of their assets. Banks that entered the current rate cycle in the highest quintile of long-term assets to total assets (greater than 59 percent) reported a 49 basis point increase in their yield on earning assets since December 2015, but a 50 basis point increase in their cost of interest-bearing deposits (Chart 22). As a result, their NIMs have grown only 7 basis points.[40] Their peers with the lowest proportion of long-term assets reported stronger increases in yields compared to deposit costs, and their NIMs grew by 53 basis points.

Rural community banks face unique challenges regarding deposit retention. Many rural community banks face added deposit retention challenges associated with long-term, structural demographic shifts and, more recently, a downturn in agriculture that has caused some farm bank customers to shift from net depositors to net borrowers. Many rural communities have witnessed decades of ongoing population decline as younger adults move to larger urban areas, leaving rural communities with smaller and older populations. Community banks in these areas are challenged to maintain deposit growth in the face of shrinking depositor bases. Moreover, when elderly depositors pass away, it is not uncommon for deposits to flow to heirs living outside the community, exacerbating challenges of deposit retention.

Chart 22
Deposit Competition Puts Margins Most at Risk at Banks With a High Share of Long-Term Assets to Total Assets



Source: FDIC

[40]NIM is yield on earning assets minus cost of funds; therefore, NIM and changes in NIM will not equal yield on earning assets minus the cost of interest-bearing deposits.

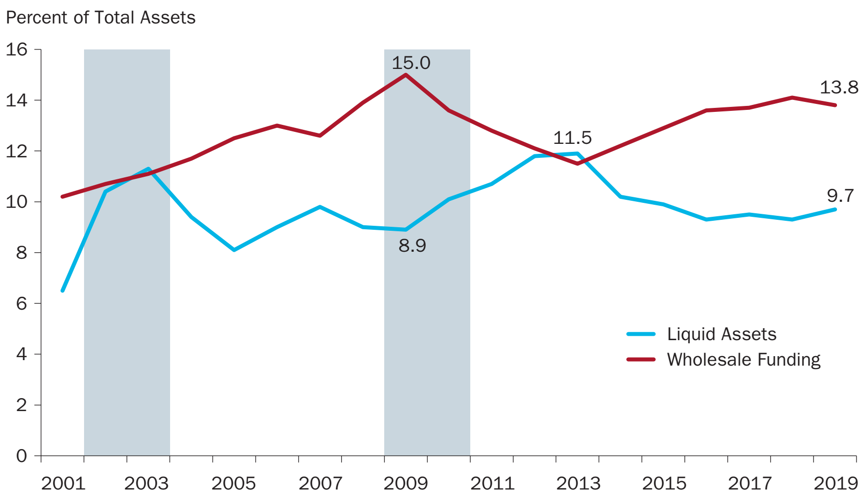
Liquidity

- ***Short-term liquidity levels have decreased in recent years for banks with assets of $100 billion or less.***
- ***Larger banks in this size range have fewer liquid assets and more wholesale funding compared to banks with assets under $1 billion.***
- ***Institutions in the Northeast report the lowest liquid asset positions.***
- ***Institutions with higher asset concentrations have lower liquid assets and higher wholesale funding.***
- ***A turn in the credit cycle could be particularly detrimental to concentrated banks with lean liquidity positions.***

Chart 23

Over the Past Six Years, Short-Term Liquidity Positions Declined While Reliance on Wholesale Funding Increased

FDIC-Insured Institutions with Total Assets Under $100 Billion



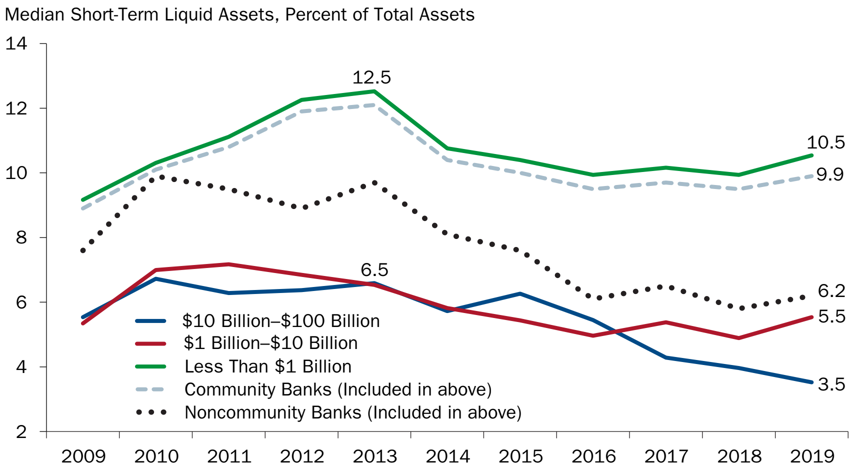
Sources: FDIC and U.S. Federal Reserve
Notes: Recessions shaded. Annual data as of first quarter.

Steady loan growth during the past several years has resulted in a decrease in short-term liquid assets and an increased reliance on wholesale funding sources for community banks. Over the past six years, short-term liquidity positions declined more than 19 percent on a median basis at FDIC-insured institutions with total assets of less than $100 billion. During that time, reliance on wholesale funding increased more than 20 percent. First quarter 2019 median short-term liquid assets were 9.7 percent of total assets, while median wholesale funding was 13.8 percent of total assets (Chart 23).[41] Brokered and listing service deposits have grown steadily as a percentage of both total assets and total wholesale funding. Liquid assets on the balance sheet, including cash and federal funds sold, have decreased in relation to total assets. This shift in balance sheet structure has widened the gap between wholesale funding and short-term liquid asset ratios.

Banks' high demand for traditional customer deposits coupled with a limited supply of this type of deposit has spurred some institutions to turn to alternative funding sources to support loan growth. As shown in Chart 23, wholesale funding usage had been slowly but steadily rising in recent years until dropping slightly in 2019. To continue to support loan growth, many banks have increased their use of wholesale funding because of the availability and convenience of this source of funds.

[41] Short-term liquid assets include cash and due from accounts, federal funds sold, securities purchased under resale agreements, and securities maturing in less than one year. Wholesale funding includes federal funds purchased and securities sold under agreement to repurchase; brokered and listing service, municipal and state, and foreign deposits; and other borrowings (such as from the Federal Home Loan Bank).

Chart 24
Medium and Larger-Sized Institutions Have Tighter Liquidity Positions



Source: FDIC
Note: Data as of first quarter of each year.

Among banks with assets of less than $100 billion, medium and larger institutions have tighter liquidity positions. For some community banks, liquidity is not a significant risk. However, liquidity is tightening, especially among institutions with total assets of more than $1 billion but less than $100 billion.[42] As of first quarter 2019, institutions with total assets between $1 billion and $10 billion had a median short-term liquid asset ratio of 5.5 percent, while institutions with $10 billion to $100 billion in total assets had an even lower ratio of 3.5 percent (Chart 24). Comparatively, institutions with total assets of less than $1 billion had a median short-term liquid assets to total assets ratio of 10.5 percent. Community banks, which are mainly smaller institutions, have higher liquidity positions than noncommunity banks.

After declining for the past several years, liquidity levels at institutions with less than $10 billion in assets have stabilized. Liquidity levels continue to decline among banks with $10 billion to $100 billion in total assets. Banks require liquidity because they cannot always control the timing of their need for funds. Institutions must be able to fund new loans, make advances on existing lines of credit, and accommodate depositor withdrawals on short notice.

Institutions in the Northeast report the lowest liquid asset positions. The ratio of short-term liquid assets to total assets has declined at FDIC-insured banks across the country since 2012, similar to the declines in the asset size groups. Institutions in the Northeast report the largest decline in liquidity ratios and the lowest median short-term liquid asset ratio. Institutions in the Northeast historically have reported lower liquid asset positions compared with other geographic areas because of residential mortgage concentrations funded by Federal Home Loan Bank borrowings rather than deposits. Institutions in the Midwest have reported declining liquidity as farm customers produced lower cash flow and required higher levels of borrowing.

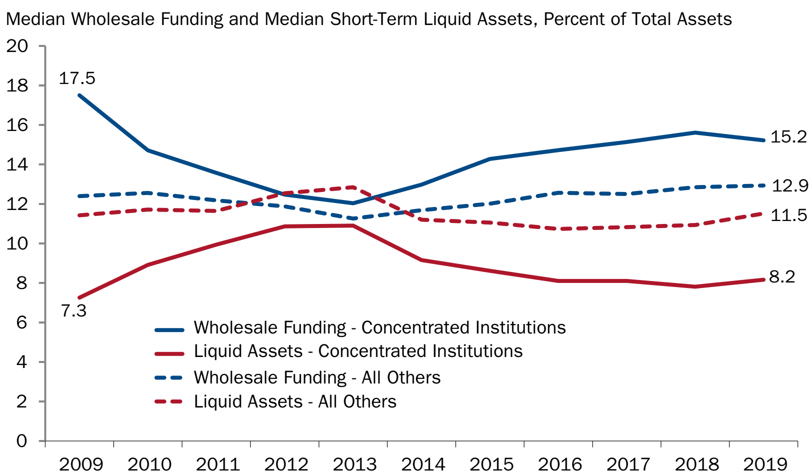
Institutions in the South and West report the highest liquidity levels, with median short-term liquid assets accounting for more than 11 percent of total assets. Institutions in other regions of the country report median short-term liquid assets between 5.5 percent and 10.5 percent of total assets.

[42] Institutions with total assets greater than $100 billion, a total of 30 institutions as of year-end 2018, were excluded from the analysis because of their unique business models, highly complicated balance sheet structures, and specific regulatory liquidity coverage requirements that set them distinctly apart from a community bank model.

Institutions with additional risk factors, such as higher asset concentrations, have lower liquid assets and higher wholesale funding. More than 47 percent of all institutions report at least one elevated lending concentration in relation to total capital as of first quarter 2019. The majority of these institutions have concentrations in ADC loans, CRE loans, or agriculture loans.[43] The median wholesale funding to total assets ratio among institutions with lending concentrations was 15.2 percent, while their median short-term liquid asset ratio was 8.2 percent (Chart 25). These levels compared with 12.9 percent and 11.5 percent, respectively, for all other institutions.

A turn in the credit cycle could be detrimental to institutions with lean liquidity positions. In the current economic environment, most institutions have adequate liquidity. However, for institutions with low levels of liquidity or high levels of less stable funding, a downturn in the economy could be problematic. For example, institutions might take significant losses if they are forced to sell securities to meet liquidity demands. For institutions that experience eroding capital or other financial stress, wholesale funding may be limited by statutory restrictions, including caps on interest rates paid for deposits. Finally, institutions with asset quality problems or deteriorating financial condition might find their funding counterparties rescinding lines of credit or demanding higher collateral margins.

Chart 25
Institutions With Other Risk Factors Such as Higher Asset Concentrations Have Lower Liquid Assets and Higher Wholesale Funding



Source: FDIC
Note: Includes banks with a minimum of 5 percent of total capital. Data as of first quarter of each year.

[43] Elevated lending concentration metrics used for this analysis include institutions with lending portfolios in total agriculture, total CRE, C&I, consumer, or residential real estate over 300 percent of total capital, or institutions with lending portfolios in ADC over 100 percent of total capital.

Acronyms and Abbreviations

ADC	Acquisition, Development, and Construction
C&D	Construction and Development
C&I	Commercial and Industrial
CLO	Collateralized Loan Obligation
CRE	Commercial Real Estate
DJIA	Dow Jones Industrial Average
E&P	Exploration and Production
EBITDA	Earnings Before Interest, Taxes, Depreciation, and Amortization
EU	European Union
FDIC	Federal Deposit Insurance Corporation
FHA	Federal Housing Administration
FOMC	Federal Open Market Committee
GDP	Gross Domestic Product
LCD	Leveraged Commentary and Data (S&P)
NIM	Net Interest Margin
PDNA	Past-Due and Nonaccrual
S&P	Standard and Poor's (S&P 500)
SNC	Shared National Credit
USDA	U.S. Department of Agriculture
USMCA	United States-Mexico-Canada Agreement
VIX	CBOE Volatility Index

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Glossary of Terms

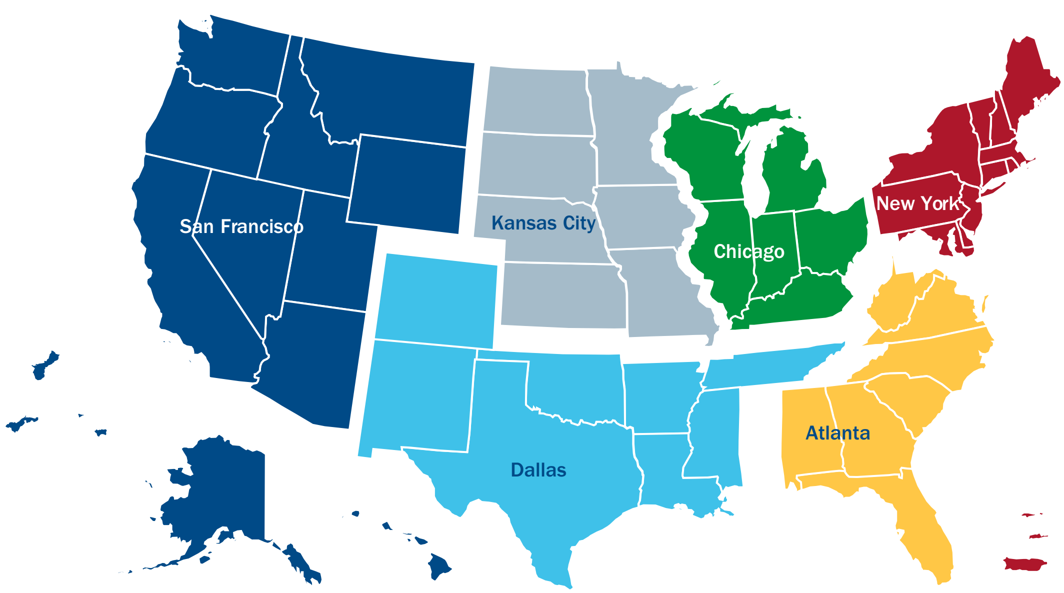
Asset Size Group	A term used to describe the insured institutions covered in the liquidity analysis in this report. Institutions with total assets greater than $100 billion, 30 institutions as of year-end 2018, were excluded from the liquidity analysis because of their unique business models, highly complicated balance sheet structures, and specific regulatory liquidity coverage requirements that set them distinctly apart from a community bank model.
Bond	A certificate of indebtedness issued by a government or corporation.
Brexit	A portmanteau for British exit from the European Union, referring to the United Kingdom's vote to leave the European Union.
Call Report	Consolidated Reports 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. See also *Regulatory Capital*.
Central Bank	An institution that oversees and regulates the banking system and quantity of money in the economy.
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	Securitization vehicles backed predominantly by commercial loans.

Community Bank	FDIC-insured institutions meeting the criteria for community banks defined in the FDIC's Community Banking Study, published in December 2012 (https://www.fdic.gov/regulations/resources/cbi/report/cbi-full.pdf). Noncommunity banks are banks that do not fit these criteria.
Composite Rating	A rating assigned by federal regulators 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.
Consolidation	Net consolidation comprises newly chartered banks and banks that close. A bank may close because of voluntary merger, failure, or other reason (such as voluntary liquidation or termination of FDIC insurance, or acquisition by an institution without FDIC insurance, such as a credit union).
Deposit Betas	The percentage of the federal funds rate that banks pass on to depositors with interest-bearing accounts.
Default	Failing to promptly pay interest or principal when due.
Farm Bank	A bank with agricultural production loans plus real estate loans secured by farmland in excess of 25 percent of total loans and leases.

FDIC Regions

Atlanta, Chicago, Dallas, Kansas City, New York, and San Francisco. The FDIC maintains a regional office in each of these cities.

- Atlanta Region: Alabama, Florida, Georgia, North Carolina, South Carolina, Virginia, West Virginia
- Chicago Region: Illinois, Indiana, Kentucky, Michigan, Ohio, Wisconsin
- Dallas Region: Arkansas, Colorado, Louisiana, Mississippi, New Mexico, Oklahoma, Tennessee, Texas
- Kansas City Region: Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota
- New York Region: Connecticut, District of Columbia, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Puerto Rico, Rhode Island, Vermont, Virgin Islands
- San Francisco Region: Alaska, American Samoa, Arizona, California, Federated States of Micronesia, Guam, Hawaii, Idaho, Montana, Nevada, Oregon, Utah, Washington, Wyoming



Federal Funds Rate	The interest rate at which a depository institution lends funds that are immediately available to another depository institution overnight.
Federal Open Market Committee	A committee created by law that consists of the seven members of the Board of Governors; the president of the Federal Reserve Bank of New York; and, on a rotating basis, the presidents of four other Reserve Banks. Nonvoting Reserve Bank presidents also participate in FOMC deliberations and discussion.
High-Yield (Junk)	Terms 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 (NRSROs). 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.
Investment-Grade	Generally, the highest-rated bonds subjected to third-party credit risk assessments by NRSROs. 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.
Household Leverage	Household debt relative to household income.
Leveraged Loans	Numerous definitions of leveraged lending exist throughout the financial services industry and commonly contain some combination of the following: • Proceeds used for buyouts, acquisitions, or capital distributions. • Transactions where 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. • Transactions when the borrower's post-financial leverage, as measured by its leverage ratios (for example, debt-to-assets, debt-to-net-worth, debt-to-cash flow, or other similar standards common to particular industries or sectors), significantly exceeds industry norms or historical levels.

Long-Term Assets	Loans and debt securities with remaining maturities or repricing intervals of more than five years.
Net Borrower	For an individual bank customer, borrowings from the bank are greater than deposits.
Net Depositor	For an individual bank customer, deposits with the bank are greater than borrowings.
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.
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 institutions.
Noncurrent Loans and Leases	Loans and leases 90 days or more past due, and loans and leases in nonaccrual status.
Nondepository Financial Institution	A more specific categorization of nonbanks, consistent with the definition provided in the instructions for the Consolidated Reports of Condition and Income (Call Reports), including real estate investment trusts, mortgage companies, finance companies, holding companies of other depository institutions, investment banks, Small Business Investment Companies, and other financial intermediaries. For additional details, refer to the instructions for Call Report Schedule RC-C, Item 9.a.
Past-Due Loans and Leases	Loans and leases 30 to 89, or 90 days or more past due and still accruing interest.
Primary Market	The market in which new stocks and bonds, in the form of initial public offers (IPOs), are issued.

Problem Banks	Institutions with financial, operational, or managerial weaknesses that 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 a "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.
Regulatory Capital	Capital set aside to provide protection against (to absorb) losses. A measure of capital as defined by supervisory authorities. Generally, regulatory capital is calculated by deducting certain assets from bank capital that have no or limited loss-absorbing capacity, and adding other items.
Regulatory Capital Requirements	Requirements that consider the risk levels of a banking organization's exposures and activities, and act to constrain leverage that a banking organization may incur by limiting the extent to which it can extend credit and invest in financial assets relative to money that the banking organization owes to others. Regulatory capital requirements are set at levels intended to foster the safety and soundness of individual banking organizations and the banking system.
Recession	A period of declining real income and rising unemployment; significant decline in general economic activity extending over a period of time.
Revolving Credit	A line of available credit that is usually designed to be used repeatedly, with a preapproved credit limit. The amount of available credit decreases and increases as funds are borrowed and is then repaid with interest.
Secondary Market	The market in which investors buy and sell securities among each other.

Securitization	A financial transaction in which assets such as mortgage loans are pooled and securities representing interest in the pool are issued.
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.
Tariff	A tax that must be paid before a good may be brought into a country.
Tax Cuts and Jobs Act	A law enacted in December 2017 that reformed both individual income and corporate income taxes.
Warehouse Lending	Short-term funding of a mortgage lender based on the collateral of warehouse loans (in mortgage lending, loans that are funded and awaiting sale or delivery to an investor). This form of interim financing is used until the warehouse loans are sold to a permanent investor. Warehouse financing is also extended in the arrangement of Collateralized Loan Obligations (CLOs) and to other securitization firms. In this context, warehouse financing is a line of credit the CLO manager uses to purchase assets. Upon the CLO's closing, the CLO repays the warehousing lenders using the proceeds from the sale of the notes, and the CLO becomes the owner of the assets. The CLO manager uses warehousing to manage market risk when they purchase assets for the deal's portfolio; the warehouse provider assumes the risk of any mark-to-market losses in the portfolio during the warehousing period.

Wholesale Funding

Federal funds purchased and securities sold under agreement to repurchase; brokered and listing service, municipal and state, and foreign deposits; and other borrowings (such as from the Federal Home Loan Bank). 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. As a result, some institutions may experience liquidity problems due to a lack of wholesale funding availability when funding needs increase.

Yield Curve

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.

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