2021
Risk Review
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Introduction

The FDIC was created to maintain stability and public confidence in the nation’s financial system. Identifying and analyzing key risks in the economy, financial markets, and the banking industry that could affect insured institutions are critical to achieving this mission. The FDIC has communicated such risks through various outreach events, research, and publications. In recent years, the FDIC began publishing a comprehensive summary of key banking sector risks in a consolidated report, the Risk Review. The Risk Review also contributes to building trust and confidence through openness and accountability, a pillar of the FDIC’s Trust through Transparency initiative.¹

FDIC-insured institutions navigated an unprecedented banking landscape in 2020 with the onset of the COVID-19 pandemic. Federal support programs cushioned the nation's economy and muted the effects of the pandemic on the banking industry, but close monitoring of key risks remains essential. The 2021 Risk Review covers key risks so policymakers and bankers can mitigate their scope and impact.

The report summarizes conditions in the U.S. economy, financial markets, and banking industry, and presents key credit and market risks to banks. The credit risk areas discussed are agriculture, commercial real estate, consumer debt, energy, housing, leveraged lending and corporate debt, nonbank financial institution lending, and small business lending. The market risk areas discussed are interest rate risk and net interest margin, and liquidity and deposits. 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 attuned to risks that may affect the U.S. banking system, community banks in particular, and benefits from this public discussion.

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.

¹ In 2018, FDIC Chairman Jelena McWilliams announced Trust through Transparency, a new initiative to foster a deeper culture of openness in the FDIC. Building on the FDIC’s foundation of public trust and accountability, this initiative is strengthening trust between the FDIC, other regulators, the public, and banks. For more information, see https://www.fdic.gov/about/initiatives/trust-through-transparency/.
Section I: Executive Summary

After a prolonged period of relative stability, economic conditions deteriorated sharply in March 2020 following the onset of the COVID-19 pandemic and closure of several key industries. The consumer, business, and banking sectors overall had entered 2020 in relative strength. Although corporate debt fundamentals raised concern, smaller businesses were growing and consumer balance sheets were strong. Many sectors of the economy were challenged as the pandemic unfolded, but federal programs provided timely and important support to affected industries and consumers throughout the year. The banking industry remained resilient entering 2021 despite the extraordinary challenges of the pandemic. Strong liquidity and capital levels at the start of 2021 should help to mitigate potential asset quality deterioration across loan portfolios.

The economy entered the deepest recession in modern history in 2020 as millions of individuals lost their jobs and many small businesses closed. The unemployment rate rose to a record high and an unprecedented number of people filed for unemployment insurance. Extensive fiscal and monetary policy helped limit the impact of the crisis and prevent mass business bankruptcies and consumer defaults. Conditions remain weak for many service industries including restaurants, retail, entertainment, travel and tourism, and other discretionary services that do not allow for remote work. The economic environment poses a significant source of risk for the banking industry as the pandemic continues into 2021. Even after vaccinations are dispensed broadly across the population, the recovery for some of the most affected industries remains uncertain.

Financial market conditions deteriorated sharply with heightened stress in early 2020, but most markets have since recovered. In March 2020, the onset of the pandemic severely disrupted financial markets, and equity and corporate bond markets saw sharp selloffs. Market conditions improved with the help of unprecedented federal support programs. Most markets fully recovered throughout the rest of 2020, and some exceeded pre-pandemic levels.

The banking sector, though challenged by economic and financial market conditions, remained relatively resilient in 2020 and was a source of stability to the economy. The banking sector was helped by strong capital and liquidity levels as well as various government programs that enabled banks to extend loan forbearance and to provide support for consumers and businesses. Industry balance sheets remained sound through 2020, but banking income declined substantially. FDIC-insured institutions reported a 36.5 percent decline in income between 2019 and 2020, which was primarily driven by a sharp increase in provision expense during the first half of the year. Bank liquidity was supported in 2020 by a record increase in deposits. Deposits surged 22.6 percent between 2019 and 2020. The banking industry loan portfolio increased in 2020, primarily because of growth in commercial and industrial loans, including those made through the Small Business Administration (SBA) Paycheck Protection Program (PPP). Asset quality indicators deteriorated modestly but remained considerably better than those reported during prior recessions, partly because of government support extended during the year.

Key Risks to Banks

FDIC-insured institutions faced a challenging landscape in 2020. Federal support programs cushioned the nation's economy and muted the effects of the pandemic on the banking industry, but close monitoring of key risks remains essential. The discussion of risks in this report is organized by topic and ordered alphabetically, not by level of risk.

Credit Risk: Banks are exposed to an array of credit risks. In 2020, these risks intensified as the economic contraction unfolded. Banks remained relatively resilient partly because of government support extended to businesses and consumers most affected by the recession. However, institutions with elevated levels of credit exposure to affected sectors are potentially more vulnerable to market disruptions and could present risk management challenges.

- **Agriculture**: The agriculture industry withstood the volatile 2020 marketplace with the help of record levels of government assistance and a rebound in commodity prices. As a result, agriculture bank conditions were sound as 2020 came to a close. Strong farmland equity has enabled farmers to restructure loans to manage operating losses and replenish working capital. Asset quality at farm banks remains favorable. Net farm income in 2021 is expected to decline from last year but remain higher than historical levels.

- **Commercial Real Estate**: The pandemic challenged commercial real estate (CRE) market conditions in 2020. Conditions weakened sharply in lodging and retail sectors at the pandemic's onset, and other property sectors face uncertainty. Increased use of remote work and potential shifts in behavior and preferences could influence the CRE outlook. The volume of CRE loans held by FDIC-insured institutions reached a record high at year-end 2020. Acquisition, development, and construction loans—historically, a riskier category of CRE loans—grew slightly in 2020 but were nearly 40 percent below the 2008 peak. Among FDIC-insured institutions, CRE loan performance metrics remain at manageable levels as loan accommodations have become part of the lending landscape.

- **Consumer Debt**: Conditions for consumers deteriorated with the onset of the pandemic as business closures contributed to double-digit unemployment. Government programs have helped support household balance sheets and consumer loan performance during the pandemic. Consumer loan volumes fell in 2020 as households pulled back on spending and used savings to reduce outstanding loan balances. While government support and improving economic conditions have helped consumers stay current on their loans, the outlook for consumer asset quality remains uncertain. An improving economy may result in stronger consumer loan performance and increased consumer lending opportunities.

- **Energy**: The energy market deteriorated sharply in 2020, but banks with exposure to lending in this sector remain resilient. Energy demand declined worldwide with the onset of the pandemic, causing energy prices to plunge. The market had already experienced substantial oversupply from a production policy impasse within the OPEC+ coalition and near-record U.S. production. After falling in early 2020, oil prices improved during the second half of the year as supply and demand imbalances improved. Oil and gas producers continue to face many challenges. Poor operational performance and escalating environmental, social, and governmental risks contributed to capital scarcity for producers. Banks with significant exposure to the energy market have shown resilience to these challenges.

- **Housing**: Housing activity recovered strongly in 2020. After housing sales and starts deteriorated immediately after the onset of the pandemic, conditions recovered strongly during the rest of 2020. Low interest rates, increased demand to accommodate remote work, and a limited supply of homes contributed to record home price increases in 2020. Banks have benefited from increased housing market activity with slightly higher lending volumes and strong refinancing activity, although loan performance metrics of 1–4 family residential mortgages at FDIC-insured institutions weakened slightly in 2020.
• Leveraged Lending and Corporate Debt: Corporate debt markets experienced disruptions early in the pandemic, but Federal Reserve actions helped to restore stability to bond and leveraged loan markets. Corporate debt levels were elevated before the pandemic and increased further in 2020 as bond issuance surged, pushing corporate debt-to-GDP to an all-time high as the level of corporate debt rose and GDP declined. Banks remain exposed to risks in corporate debt markets through direct loans and lines of credit to corporations, holdings of collateralized loan obligations, and participation in the arranging of leveraged loans and corporate bonds, as well as indirect macroeconomic effects of corporate debt distress on other loan portfolios. Banks with concentrations in loans to firms in especially hard-hit industries could face elevated credit losses as those firms struggle to recover from the pandemic.

• Nonbank Financial Institution Lending: Bank exposure to nonbank lenders increased significantly in 2020, particularly in mortgage lending. Nonbank financial institutions relied on bank lending amid the uncertainty at the onset of the pandemic. Most of the lending to nonbank financial institutions occurs at the largest banks, but some community banks are a source of lending to nonbank mortgage lenders. The growth in banking sector exposure to nonbank financial institutions in 2020 increased the industry’s vulnerability to risks from nonbanks and their lending activities.

• Small Business Lending: Small business conditions weakened significantly at the onset of the pandemic as stay-at-home orders and changing consumer behavior reduced economic activity. However, small business lending increased in 2020 primarily because of bank participation in the PPP. Further, small business closures and bankruptcies did not translate into credit deterioration in 2020. While asset quality remains at manageable levels, the long-term effect of the pandemic on small business asset quality is uncertain and remains an important source of credit risk for banks.

• Market Risk: The low interest rate environment presents earnings challenges to banks. However, bank liquidity positions remain strong as deposits grew rapidly in 2020. Uncertainty in the economy, coupled with a sudden rise in deposits, led many community banks to allocate a higher percentage of assets to readily available liquidity sources. Community bank reliance on wholesale funding decreased as deposits rose.

• Interest Rate Risk and Net Interest Margin: The low interest rate environment continues to pressure banking sector profitability. The net interest margin reached a record low as asset yields declined more than funding costs. The ratio of loans to total assets also declined for community and noncommunity banks in 2020, as strong deposit inflows exceeded loan demand. Community banks face interest rate risk challenges in a low interest rate and tepid loan environment.

• Liquidity and Deposits: Banks entered 2020 with strong liquidity, and deposit growth during the year further increased liquidity levels. Deposits surged during the pandemic, as consumers and businesses responded to uncertainty by stockpiling cash. Federal programs created to mitigate economic stress contributed to unprecedented deposit growth. Increased on-balance sheet liquidity reduced many community banks’ reliance on wholesale funding. While industry liquidity improved last year, sudden changes in depositor behavior as pandemic conditions evolve warrant monitoring.
Section II: Economic, Financial Markets, and Banking Industry Overview

Economy

- The U.S. economy entered a recession in February 2020 as the pandemic caused a historic decline in economic activity.
- Labor markets deteriorated significantly in 2020 and remained weak despite the recovery that began in the second half of the year.
- Throughout 2020, substantial fiscal and monetary policy measures were enacted to support consumers and businesses.
- Conditions remain weak for many service industries including restaurants, retail, entertainment, travel and tourism, and other discretionary services that are not essential or do not allow for remote work.

The economy entered a recession in February 2020 as the onset of the pandemic halted economic activity. The economy started 2020 in a period of record-long expansion. The expansion ended abruptly with the onset of the pandemic and related restrictions on business and consumers. The decline in economic activity was swift, severe, and broad-based. U.S. real gross domestic product (GDP) contracted 5.0 percent in first quarter and continued to decline at a 31.4 percent annualized rate in second quarter, the sharpest decline on record (Chart 1). The economic contraction was widespread across sectors (Chart 2).

Chart 1

<table>
<thead>
<tr>
<th>Year</th>
<th>Real U.S. Gross Domestic Product</th>
<th>Quarterly percent change at annual rate</th>
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<tbody>
<tr>
<td>2014</td>
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<tr>
<td>2022</td>
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</tbody>
</table>

Sources: Bureau of Economic Analysis (Haver Analytics), Blue Chip Forecasts (January 2021), and FDIC.

Chart 2

The Pandemic Affected All GDP Sectors in 2020

Sources: Bureau of Economic Analysis (Haver Analytics).

1 Quarterly GDP growth rates are expressed as a real seasonally adjusted annualized rate.
Containment efforts related to the pandemic contributed to declines in business and consumer spending. Both imports and exports declined in 2020 as domestic consumption and global trade fell. Government spending at the federal level supported the economy but declined at the state and local levels because of increasing budgetary pressures.

The economy began to slowly reopen in May and June. GDP grew by 33.4 percent in third quarter, recovering roughly two-thirds of the contraction in the first half of the year. Economic activity moderated in fourth quarter as the initial impact of reopening waned and resurgence of the pandemic resulted in tighter restrictions in some states. GDP grew by 4.0 percent in fourth quarter, well below the record third quarter pace.

The economic recovery has been uneven across sectors, in a pattern that is atypical of recessions. While all sectors were initially hit hard during the onset of the pandemic, goods-producing sectors have recovered relatively quickly and service sectors have lagged. Traditionally, the services portion of consumption is less affected by downturns, but the unique nature of this pandemic-driven recession has hit this sector particularly hard. Goods-producing sectors have benefited from consumer and business spending related to the transition to a remote work environment.

The unemployment rate reached new highs in 2020, and employment prospects for key service sectors remain weak. The unemployment rate increased rapidly from 3.5 percent in February, the lowest level in decades, to 14.8 percent in April, the highest unemployment rate since the Great Depression (Chart 3). Initial unemployment insurance claims rose by more than one million, well above the previous recorded peak. The partial reopening of the economy caused the unemployment rate to retreat from its record highs, but labor market improvement moderated during the second half of the year. The unemployment rate at the end of 2020 was 6.7 percent.

While more than half of the jobs lost in March and April were recovered by year end, job growth was uneven across industries. Employment in industries that require face-to-face interaction with customers, jobs that cannot be performed remotely, and jobs related to discretionary and leisure activities had the largest losses and recovered the slowest (Chart 4). Leisure and hospitality—primarily restaurants and drinking establishments—have been especially hard hit as consumers reduced such activities and many state and local orders limited the operating capacity of these establishments through the end of 2020 and into early 2021. Government job losses have been elevated and have been concentrated at the state and local level as states contend with tight budgets from greater spending and lower tax revenue from the decline in economic activity. Job losses in education

Chart 3

The Unemployment Rate Reached New Highs in 2020 but Has Begun to Recover

Civilian Unemployment Rate Percent

Unemployed+ Marginally Attached+ Part Time for Economic Reasons (Top Line)

Unemployment Rate (Bottom Line)

Source: Bureau of Labor Statistics (Haver Analytics).
Note: Shaded areas indicate recessions.
and healthcare were affected by school closures and by patients and providers forgoing nonemergency elective services.

**Individual states and regions have faced uneven economic conditions owing to the spread of COVID-19 and the nature of public health orders.** As the virus first halted economic activity in the United States in March 2020, some states enacted stay-at-home orders sooner and with tighter restrictions than other states. Despite the recovery in the second half of the year, most states ended 2020 with higher unemployment rates than before the pandemic (Map 1). In addition, other factors at the state and local level affected the magnitude of the economic disruption and speed of reopening. States with a higher share of industries most affected by the pandemic, such as leisure and hospitality, experienced larger increases in unemployment. The speed of states’ labor market recovery in the third and fourth quarters depended partly on when public health orders and other pandemic safeguards were lifted.

Both the federal government and the Federal Reserve enacted fiscal and monetary policies to support the economy. Monetary and fiscal policies were put in place quickly to help combat the economic effects of the pandemic on the economy. Congress passed stimulus packages in March, April, and December that included several major components to help households and businesses. Support to households included two rounds

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4 For this analysis, regions are Census Regions and Divisions of the United States. See U.S. Census Bureau at [https://www2.census.gov/geo/pdfs/maps-data/maps/reference/us_regdiv.pdf](https://www2.census.gov/geo/pdfs/maps-data/maps/reference/us_regdiv.pdf).
of direct stimulus payments to qualifying individuals, expanded and extended unemployment insurance benefits, and new unemployment benefits that covered workers not traditionally covered by unemployment insurance. Congress also put in place eviction moratoria and forbearance programs. Businesses benefited from the creation of the PPP, which offered support in the form of loans. To extend the support to households and businesses, Congress passed additional rounds of stimulus in December 2020 and March 2021 that included an extension of unemployment benefits and the PPP, among other measures.

The Federal Reserve also took expansive action implementing monetary policies to support financial markets. The Federal Open Market Committee reduced the federal funds rate to the zero lower bound in two emergency meetings in March and signaled that rates will remain low until economic conditions have recovered (Chart 5).

The Federal Reserve also restarted several emergency lending programs developed during the Great Recession and introduced new programs to support the economy. While the take-up of the new facilities was modest, they helped support market confidence.

Weak labor market conditions pose risks to banks through potential asset quality deterioration. As people are laid off from work, particularly for an extended period, they may be forced to draw down their savings and prioritize certain expenditures, increasing the risk of rising loan delinquency and default rates for consumer loans and residential mortgages. In addition to debt servicing issues, unemployment or uncertainty about employment also reduces demand for new loans, limiting the prospects for new loans in the medium term. Banks may also respond by tightening standards for loans, which would further reduce loan growth. Fiscal stimulus in the form of government transfer payments, extended and enhanced unemployment insurance benefits, forbearance programs, and eviction moratoria supported unemployed consumers in 2020. In fact, aggregate personal income increased in 2020.

Many businesses, especially small businesses, were closed due to public health orders in 2020, increasing risk to asset quality for banks. The unique nature of the pandemic-driven recession halted economic activity broadly, harming businesses and individuals. Surveys on business closures suggest that at the height of stay-at-home orders in April, almost 50 percent of businesses were temporarily closed. While those numbers improved as the economy reopened, surveys suggest that more than 20 percent of businesses remained closed at year-end 2020, relative to a year earlier. Missed payments on business loans increased across a wide range of industries during the early stages of the pandemic, though delinquency rates have stabilized as parts of the economy reopened and various federal programs were
implemented. The public health aspect of this recession may affect or reshape whole industries, creating more prolonged distress to banks that specialize in certain types of loans. In addition, the economy re-entered a historically low interest rate environment that may alter, at least temporarily, the composition of bank profitability but also may provide new channels for lending and banking services for large and community banks. These risks and challenges are discussed in more detail later in this report.

The nation's economic outlook may improve as more of the population becomes vaccinated, but economic conditions remain uncertain and vary greatly across sectors and geographies. The banking outlook should improve with overall economic conditions, but improvement in the banking outlook may be more gradual than GDP growth or improvement in the unemployment rate.

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1 For more information, see the U.S. Census Bureau Small Business Pulse Survey at https://www.census.gov/data/experimental-data-products/small-business-pulse-survey.html.
Financial Markets

- In March 2020, the onset of the COVID-19 pandemic severely disrupted financial markets; equity and corporate bond markets saw sharp selloffs.
- Market conditions improved with the help of unprecedented federal support programs. Most markets fully recovered by the end of 2020.
- Several key markets related to vulnerable industries, such as energy, remained below pre-pandemic highs.
- Corporate bond issuance set a record in 2020 as companies sought cash to ride out pandemic disruptions and later took advantage of historically low interest rates.

In March 2020, severe financial market disruptions were calmed with the help of unprecedented Federal Reserve support. Prices in oil and equity markets declined sharply in late February and early March, as these markets were among the first to anticipate the material effects that the pandemic would have on the economy. Corporate investment grade and high-yield bond markets as well as municipal bonds subsequently experienced a rapid selloff. Market liquidity deteriorated as transaction costs increased and some securities dealers pulled back from making markets.

One of the most concerning disruptions in the market selloff was the volatility of Treasury securities, critical benchmarks for financial assets. Treasury yields fell rapidly at the onset of the pandemic before forced selling (in a “dash for cash”) caused yields to shoot back up. One source of selling pressure was corporate bond funds. Outflows from corporate bond funds compelled those funds to sell Treasury securities they held as liquidity buffers. The selloff was exacerbated by hedge funds that were buying Treasuries but were forced to sell after reaching stop-loss limits. During the selloff, Treasury bid/ask spreads widened and liquidity deteriorated.

Financial markets stabilized in the days after the Federal Reserve dropped its target federal funds rate to near zero and pledged to purchase at least $500 billion of U.S. Treasuries. The Federal Reserve followed through on that pledge, purchasing Treasury and agency securities at an unprecedented rate (Chart 6).

![Chart 6: The Federal Reserve’s Balance Sheet Expanded More Rapidly in 2020 Than in 2008](chart)

The Federal Reserve’s balance sheet grew by $2.5 trillion in two months.

The Federal Reserve’s liquidity facilities enhanced confidence and helped stabilize markets, despite seeing less usage than the facilities in effect during the Great Recession.

Source: Federal Reserve.
Note: All Liquidity Facilities includes Term Auction credit, primary credit, secondary credit, seasonal credit, Primary Dealer Credit Facility, Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility, Term Asset-Backed Securities Loan Facility, Commercial Paper Funding Facility, Money Market Mutual Fund Liquidity Facility, and central bank liquidity swaps.
Beginning in late March through early April, the Federal Reserve increased its market support by unveiling 11 emergency lending programs. These backstop programs contributed to lower interest rates and borrowing costs in corporate bond, securities, and other markets, despite limited usage. These programs also served to stabilize financial markets by providing liquidity during a period of heightened uncertainty. The Federal Reserve aided the recovery of financial markets throughout the rest of 2020 by setting expectations for maintaining an accommodative stance—both in terms of rates and asset purchases—into the foreseeable future.

After touching all-time lows in August 2020, benchmark interest rates started on an upward trajectory that continued through the end of the year and into 2021. The 10-year Treasury yield fluctuated considerably in March with the heightened uncertainty at the onset of the pandemic, including setting an all-time low of 0.54 percent on March 9, 2020. The benchmark rate reached a new record low of 0.52 percent on August 4, 2020, amid renewed concerns about the economic outlook. The August low marked the beginning of a period of rising rates, as investors looked more optimistically toward a post-COVID-19 recovery. By year end, the yield on the 10-year Treasury had increased to 0.93 percent from its August low as prospects for the recovery improved (Chart 7).

The yield curve steepened throughout 2020. The difference between the 10-year Treasury yield and the 2-year Treasury yield, a commonly cited measure of the yield curve, more than doubled from 34 basis points at the beginning of 2020 to 80 basis points at the end of 2020. Another measure of the yield curve, the difference between 30-year and 5-year Treasury yields, increased from 70 to 129 basis points by the end of 2020. Early in the year, the yield-curve steepened as the decline in short-term interest rates outpaced the decline in long-term rates. During the last five months of 2020 (and into 2021), the yield curve saw additional steepening as long-term interest rates rose and short-term rates remained near zero.

Stabilizing debt markets and historically low yields led to a record amount of investment grade and high-yield corporate bond issuance in 2020. During the March 2020 market stress, corporate bond spreads widened dramatically. For example, the additional yield investors required for BBB-rated corporate bonds relative to Treasury bonds neared 5 percent at one point, up from 1.3 percent at the start of the year. After the introduction of Federal Reserve support, corporate bond spreads gradually declined from March highs and reached pre-pandemic levels by the end of the year. The combination of low benchmark rates and declining spreads resulted in historically low borrowing rates. Several offerings

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**Chart 7**

After a Period of Volatility in March, the 10-Year Treasury Yield Ended the Year on an Upward Trajectory

[Graph showing the yield curve and its movements from January 2020 to January 2021.]

1For more information on the Federal Reserve’s funding, credit, liquidity, and loan facilities, see [https://www.federalreserve.gov/funding-credit-liquidity-and-loan-facilities.htm](https://www.federalreserve.gov/funding-credit-liquidity-and-loan-facilities.htm).

BBB-rated bonds are the lowest-rated bonds considered investment grade and also make up the largest segment of investment grade bonds.
from highly rated companies ranked among the lowest-coupon corporate issuances ever.

Companies responded to the low-rate environment by issuing $2.3 trillion in corporate bonds, the most ever in a year (Chart 8). The 2020 issuance was 60 percent above the 2019 level, despite slowing issuance at the end of the year. The largest increase was from investment grade issuers, but high-yield issuance also rose, up 51 percent from 2019. While companies benefited by locking in low rates, the continued rise in corporate debt levels makes bond issuers vulnerable to the risk of refinancing at higher interest rates.

The municipal bond market also saw record issuance in 2020 with an upward trend in taxable debt as a share of total municipal bonds. Like corporate bond spreads, municipal spreads widened in March and narrowed following the Federal Reserve’s market support. Faced with low borrowing rates, municipalities set a record for issuance in 2020 with $476 billion in offerings. Taxable bond issuance more than doubled in 2020, while non-taxable bond issuance decreased. As a share of total municipal issuance, taxable debt rose to 31 percent in 2020 from 17 percent in 2019 and just 8 percent in 2018. Low interest rates have allowed cities and states to refinance older tax-exempt debt, replacing the older debt with lower-coupon taxable bonds.

The pandemic and related government actions had a large impact on equity market movements throughout the year. Overall, the stock market performed well in 2020. The Standard and Poor’s (S&P) 500 Index finished the year up 16.3 percent, and the Dow Jones Industrial Average finished up 7.3 percent. But this period was characterized by market movements responding to pandemic developments throughout 2020.

After falling as much as 34 percent from its peak, the S&P 500 Index rose largely on the performance of its five largest constituent companies. The companies were predominately technology providers whose business models performed well during the pandemic. By July, the top five stocks accounted for 22 percent of S&P 500 Index market capitalization, a record dating back to at least 1980. Technology stocks generally performed well in 2020, in part because demand for those companies’ products increased sharply in the remote work world. Historically low benchmark rates also helped propel the NASDAQ Composite to a 43.6 percent return for the year.

News of vaccine developments in the latter part of the year contributed to strong performance of smaller stocks, as investors anticipated a recovery for companies affected by the pandemic. The Russell 2000, a small-cap index, had the best quarter in its history in fourth quarter 2020 with a return of 31.4 percent.8 Bank stocks underperformed in 2020. The KBW Bank Index, which includes 24 of the largest U.S. banking organizations, fell 13.6 percent in 2020. The broader S&P 500 Financials sector was the third-worst performer

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8 The full-year 2020 return for the Russell 2000 was 20.0 percent.
out of 11 sectors, falling 4.1 percent. Bank stock underperformance reflected the weak outlook for banks that persisted for much of 2020. However, this outlook improved at the end of the year on rising long-term interest rates, and bank stocks recovered some ground in early 2021.

The VIX, a frequently cited measure of expected volatility, remained elevated for the last ten months of 2020. The Chicago Board Options Exchange Volatility Index (VIX) jumped in March to more than six times its level at the start of the year and reached its highest mark since 2008 and the highest end-of-day reading ever. As market strains eased, the VIX fell but remained elevated for the rest of 2020. It is somewhat unusual for the VIX to remain elevated while equities perform well, as they did the last three quarters of 2020.

Oil companies were some of the hardest hit by the pandemic. Demand for oil dropped precipitously in the spring as businesses closed and people worldwide stayed home to combat the pandemic. Oil producers could not shut off supply fast enough and oil storage began to reach capacity. The supply and demand mismatch became so extreme in April that the price of oil, as measured by the West Texas Intermediate futures contract, briefly turned negative (Chart 9).

While other markets rebounded strongly, oil prices did not fully recover in 2020. The S&P 500 Energy sector dropped 37.3 percent in 2020 despite an overall increase in the S&P 500 of 16.3 percent.

By year end, financial market conditions were stable with strong price gains in many markets, particularly corporates and equities. Financial market conditions reflected the improved economic conditions and outlook. Investor risk appetite returned and markets' risky assets, including high-yield corporate bonds, recovered. While financial market conditions have improved significantly, they remain sensitive to developments related to the pandemic. Significant volatility and shifts in interest rates may pose challenges to the banking sector.

### Chart 9

In April, Oil Prices Turned Negative for the First Time in History

[Chart showing Crude Oil Price, West Texas Intermediate from March 2020 to November 2020 with a note on data source and note on data range from January 2020 through December 2020.]

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*The VIX did not close below 20 during the last ten months of 2020 compared to a long-term historical average of about 19 coming into the year.*
Banking Industry

- The COVID-19 pandemic introduced new challenges to the banking industry.
- FDIC-insured institutions reported lower net income in 2020 compared with 2019, primarily because of higher provision expense and lower net interest income.
- Deposits surged in 2020 on economic uncertainty and increased savings by consumers.
- The aggregate banking industry loan portfolio grew in 2020 owing to an increase in commercial and industrial (C&I) loans, which included PPP loan originations.
- Asset quality indicators deteriorated modestly in 2020 but remained strong partly because of government assistance for borrowers.

The COVID-19 pandemic introduced new challenges. When mandatory stay-at-home orders were put in place at the onset of the pandemic, banks had to quickly adapt to provide and maintain an acceptable level of customer service while limiting branch access. Banks pivoted to remote access to banking services through online and mobile applications, and many banks shifted employees to remote work to ensure their safety. To safeguard the security and privacy of customer information, some banks built out telecommunications infrastructures, increased Internet capacity in data centers, and enhanced application portfolios to enhance remote productivity.

Despite changes in the operating environment and challenges presented by the pandemic, the banking industry continued to report positive financial performance and strong capital levels in 2020. The 5,001 FDIC-insured financial institutions benefited from positive net income, robust deposit growth, and strong asset quality metrics. Total bank equity capital grew 5.4 percent in 2020 and reached the highest level on record. Common equity tier 1 capital grew 7.5 percent, increasing resiliency to sustain potential losses in the future. As of December 31, the FDIC’s “Problem Bank List” included 56 institutions, well below the crisis peak of 888 in 2011. Only four banks failed in 2020.

The banking industry reported net income of $147.9 billion in 2020, down 36.5 percent from a year earlier. The decline in banking industry net income was largely due to higher provisions for loan and lease losses reflecting economic concerns due to the pandemic and partially due to the implementation of the Current Expected Credit Losses (CECL) accounting standard that requires estimating credit allowances for the life of a loan. Insured institutions reported $132.2 billion in provisions in 2020, up $77.1 billion from 2019 (Chart 10). The increase in provisions, however,

| Increase in Provision Expense Drove Decrease in Net Income |
| Annual Change | $ Billions |
| Net Interest Income | Noninterest Income | Provision Expense | Noninterest Expense | Securities Gains (Losses) | Applicable Income Taxes | Net Income |
| -20.0 | 15.9 | 77.1 | 32.0 | 4.2 | 24.5 | -84.9 |

Source: FDIC.
Note: Annual data as of fourth quarter 2020.
was largely concentrated in the first half of the year. Faced with much uncertainty and concerns due to the pandemic, government-issued lockdowns, and increase in unemployment, banks reserved $114.3 billion in the first half of the year. As the economic outlook improved and progress was made in developing a vaccine, banks released their provision expenses in the latter half of the year. In fourth quarter 2020, net provision expenses declined to $3.5 billion, the lowest quarterly level since second quarter 1995.

Interest rate cuts in the first half of 2020 pressured yields on earning assets. Net interest income decreased by 3.7 percent in 2020 to $526.6 billion. Annual net interest margin (NIM) for the industry fell to 2.82 percent, down 53 basis points from year-end 2019 (Chart 11). This was the lowest annual NIM since year-end 1984, when data collection began. Continued low interest rates and ensuing NIM compression may pose earnings and liquidity challenges for some institutions, particularly those that rely heavily on interest income.

As of December 31, 2020, community banks reported an annual NIM of 3.39 percent, the lowest since year-end 1988. Relative to the banking industry as a whole, community bank NIM benefited from higher yields from holding more long-term earning assets. While this helped community banks in 2020, it may present challenges going forward as assets mature and begin to reprice at lower yields.

Net interest income rose 6 percent to $280.2 billion from a year earlier, largely due to an 89.3 percent increase in net gains on loan sales as record low mortgage rates coupled with a strong demand for larger homes boosted housing sales and refinances. Noninterest expense rose 6.9 percent to $498.2 billion in 2020, primarily because of salary and employee benefits expenses.

Noninterest income rose 6 percent to $280.2 billion from a year earlier, largely due to an 89.3 percent increase in net gains on loan sales as record low mortgage rates coupled with a strong demand for larger homes boosted housing sales and refinances. Noninterest expense rose 6.9 percent to $498.2 billion in 2020, primarily because of salary and employee benefits expenses.

The banking industry saw unprecedented deposit growth in 2020 as increased economic and market uncertainty shifted consumer and business spending and saving behavior. Expanded monetary policy, coupled with government assistance and support programs, including stimulus and unemployment payments and the PPP, bolstered cash for consumers and businesses, which further supported deposit growth and personal savings. Total deposits increased $3.3 trillion, or 22.6 percent, in 2020, the largest annual growth since 1984 (Chart 12). The influx of cash resulted in increased balance sheet liquidity and decreased reliance on wholesale funding. Community banks mirrored the industry’s deposit growth, reporting a $330.5 billion (18.4 percent) increase in deposits during the year.

The growth in deposits resulted in a large increase in assets, which led to a lower return on assets ratio (ROA) in 2020. Assets grew $3.2 trillion (17.4 percent) in 2020, well above the 2008 to 2019 average of 3.1 percent. Much of the growth was in low-yielding assets. Cash and balances due from depository institutions increased $1.5

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**Chart 11**

**Net Interest Margin Hit a Record Low**

<table>
<thead>
<tr>
<th>Year</th>
<th>Community Banks (3.39 percent)</th>
<th>Industry (2.82 percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>3.75</td>
<td>3.65</td>
</tr>
<tr>
<td>2009</td>
<td>3.50</td>
<td>3.35</td>
</tr>
<tr>
<td>2010</td>
<td>3.25</td>
<td>3.15</td>
</tr>
<tr>
<td>2011</td>
<td>3.00</td>
<td>2.90</td>
</tr>
<tr>
<td>2012</td>
<td>2.75</td>
<td>2.65</td>
</tr>
<tr>
<td>2013</td>
<td>2.50</td>
<td>2.40</td>
</tr>
<tr>
<td>2014</td>
<td>2.25</td>
<td>2.15</td>
</tr>
<tr>
<td>2015</td>
<td>2.00</td>
<td>1.90</td>
</tr>
<tr>
<td>2016</td>
<td>1.75</td>
<td>1.65</td>
</tr>
<tr>
<td>2017</td>
<td>1.50</td>
<td>1.40</td>
</tr>
<tr>
<td>2018</td>
<td>1.25</td>
<td>1.15</td>
</tr>
<tr>
<td>2019</td>
<td>1.00</td>
<td>0.90</td>
</tr>
<tr>
<td>2020</td>
<td>0.75</td>
<td>0.65</td>
</tr>
</tbody>
</table>

Source: FDIC.
Note: Data as of fourth quarter 2020.
trillion (91.2 percent), while securities grew $1.1 trillion (28.4 percent) in 2020. Net loans and leases increased by a modest 2.2 percent. The annual ROA ratio for the industry fell to 0.72 percent at year-end 2020, 57 basis points lower than year-end 2019. Community banks reported a more modest decline in the ROA ratio to 1.09 percent, 10 basis points below year-end 2019. This was the first year since 2008 that the community bank ROA ratio surpassed the industry (Chart 13).

Banking industry loan growth was primarily driven by rapid growth in the C&I loan portfolio in 2020. Total loans increased $345 billion during the year, led by a $232.8 billion increase in C&I loans as businesses drew down credit lines as a precautionary measure to support liquidity and as banks provided PPP loans. Excluding PPP loans, total C&I loans would have contracted by nearly 8 percent in 2020. At the end of fourth quarter 2020, 83 percent of all banks and 84 percent of community banks held PPP loans totaling $407 billion. Growth in nonfarm nonresidential properties (up $52.4 billion) and construction and development loans (up $24.3 billion) also contributed to net loan growth (Chart 14). Due to increased saving and reduced spending stemming from stay-at-home restrictions and behavioral changes from the pandemic,
loans to individuals declined $93.3 billion (5.1 percent),
led by a $119.5 billion (12.7 percent) decrease in credit
card loans, the highest fourth quarter year-over-year
reduction in both categories since 1985.

Despite modest deterioration, asset quality indicators
remained relatively strong at year-end 2020. As of
December 31, 2020, the noncurrent loan rate for the
banking industry was 1.18 percent, up 28 basis points
from year-end 2019 but well below the high of 5.44
reached in year-end 2009. The annual net charge-off rate
was 0.50 percent, down 2 basis points from year-end
2019 and well below the high of 2.55 percent at year-
end 2010 (Chart 15). Community banks also reported
modest asset quality deterioration in 2020, but the noncurrent rate of 0.77 percent and the charge-off rate
of 0.12 percent remained below the industry overall. The
industry’s coverage ratio, which compares the amount
of loan-loss reserves to noncurrent loans, jumped to
184.1 percent in 2020 (up 54.2 percent from 2019) owing
to the significant increase in provisions for loan and
lease losses.

Government assistance and forbearance programs
for some mortgages and student loans have helped
to support asset quality during the pandemic. The

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**Chart 14**

**Commercial and Industrial Loans Led Loan Growth**

12-Month Growth Rate

<table>
<thead>
<tr>
<th>Percent</th>
<th>Total Loans &amp; Leases</th>
<th>Commercial &amp; Industrial</th>
<th>Construction &amp; Development</th>
<th>Secured by 1-4 Family Residential Properties</th>
<th>Nonfarm Nonresidential Real Estate</th>
<th>Loans to Individuals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
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<td></td>
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<tr>
<td>20</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td></td>
<td></td>
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<tr>
<td>10</td>
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<td></td>
<td></td>
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<tr>
<td>5</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: FDIC.
Note: Data as of fourth quarter 2020.

**Chart 15**

**Asset Quality Indicators Remained Relatively Strong at Year-End 2020**

<table>
<thead>
<tr>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noncurrent and Net Charge-Off Rate</td>
</tr>
<tr>
<td>Coverage Ratio</td>
</tr>
</tbody>
</table>

- Noncurrent Loan and Lease Rate (Left Axis)
- Net Charge-Off Rate (Left Axis)
- Coverage Ratio (Right Axis)

Source: FDIC.
Note: Data as of fourth quarter 2020.
PPP further supported small businesses by providing potentially forgivable loans to cover eligible expenses. In addition, relief measures by federal banking regulators that have prevented loans from advancing to delinquency status have also helped to support asset quality at insured institutions.\textsuperscript{10}

Consistent with pre-pandemic trends, branch reductions continued in 2020 as banks leveraged digital delivery channels and consumers embraced online banking. As of June 30, 2020, Summary of Deposits data showed there were 85,040 branches, down 1.6 percent from June 30, 2019 (Chart 16). Branches of community banks decreased at a higher rate of 2.7 percent.

Net charter consolidation rate slightly decreased between 2019 and 2020 (Chart 17).\textsuperscript{11} The pandemic and challenging economic conditions could contribute to renewed consolidation and merger activity in the near term, particularly for banks already facing significant earnings pressure from low interest rates and a potential increase in credit losses.

Throughout 2020, the banking industry demonstrated resilience despite continued economic challenges and uncertainties relative to the COVID-19 pandemic. The next sections of this report explore the specific credit and market risks that will continue to challenge the banking industry in 2021.


\textsuperscript{11}Net charter consolidation is the sum of the number of failures, intra-company consolidations, inter-company mergers, new charters, and other closings.
Section III: Key Risks to Banks

CREDIT RISK

Agriculture

- Agricultural producers weathered the volatile 2020 marketplace with the help of record levels of government assistance and a rebound in commodity prices.
- Despite improving agricultural market fundamentals, net farm income is expected to decrease in 2021 from last year because of lower direct government farm payments.
- Strong farmland equity has enabled farmers to restructure loans to manage operating losses and replenish working capital, minimizing agricultural credit problems at insured institutions.

As of fourth quarter 2020, there were 1,163 farm banks comprising nearly one-quarter of all FDIC-insured institutions. All but nine of these banks are also considered community banks by the FDIC’s definition (see Glossary of Terms). In fourth quarter 2020, agricultural loans held by FDIC-insured institutions totaled $175 billion.

- Community banks hold 71 percent ($123 billion) of total agricultural loans.
- Twenty-five percent of farm banks (6 percent of all banks) hold a concentration of agricultural loans above 300 percent of capital (tier 1 capital and credit loss reserves for loans and leases).
- Exposure to agricultural lending is concentrated in the Midwest.

Regional Exposure to Agricultural Lending
Dots on map represent banks with total agricultural loans above 300 percent of capital.

Source: FDIC.
The agricultural industry encountered significant volatility in 2020, but conditions improved by year end. The Phase 1 trade agreement between the United States and China, signed in early 2020, was expected to benefit the agricultural industry by reducing uncertainty with one of the nation’s largest export markets for agricultural products. Unfortunately, the COVID-19 pandemic quickly changed the landscape for farmers.

Initially, the pandemic-induced shutdowns caused significant disruptions for U.S. agricultural producers as food demand and supply chains were disrupted. Closures of schools and entertainment venues and declines in restaurant dining and travel created a sudden drop in commercial demand for food products. In some instances, such as in dairy and fresh produce, farmers dumped their products because they had no buyers. COVID-19 outbreaks among workers at meat-processing facilities across the country caused shutdowns that created processing bottlenecks and backlogs of market-ready cattle and hogs, forcing some growers to euthanize animals. Ethanol production declined sharply as gasoline demand fell during the initial months of the pandemic, dragging down corn prices.

Prospects improved in the second half of 2020. The record level of government assistance and a rebound in commodity prices largely due to rising exports combined to reverse pandemic-induced losses. According to the U.S. Department of Agriculture (USDA), net farm income, a broad measure of profitability, reached $121.1 billion in 2020, an increase of 46 percent from the 2019 level (Chart 18).

Unprecedented levels of government assistance played a significant role in helping agricultural producers withstand the volatile marketplace. Producers received $32.4 billion in pandemic-related relief payments, boosting total direct government payments in 2020 to an all-time high $46.3 billion. Government payments accounted for 38.2 percent of net farm income in 2020, the largest percentage in more than 15 years.

A resurgence in export demand helped commodity prices recover in the latter half of 2020. Since early 2018, U.S. agricultural producers have faced international trade challenges because of ongoing trade disputes with key agricultural trading partners, including China. China has emerged as one of the top export markets for U.S. agricultural goods. In the latter half of 2020, the level of exports to China increased significantly as China continued to battle African swine fever, which has decimated its pork production. During 2020, China’s imports of U.S. pork increased 75 percent from the year before.

Rebuilding of China’s hog herd also created a need for additional feed, resulting in strong imports of U.S. corn and soybeans. Corn exports to China reached their second highest level in 2020, and soybean exports

Chart 18

Record Government Payments Helped Net Farm Income Recover in 2020

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Net Farm Income</th>
<th>Net Farm Income Minus Government Payments</th>
<th>Government Payments</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>$112.7 billion</td>
<td>111.4 billion</td>
<td>$1.3 billion</td>
</tr>
<tr>
<td>2014</td>
<td>$123.7 billion</td>
<td>121.1 billion</td>
<td>$2.6 billion</td>
</tr>
<tr>
<td>2015</td>
<td>$111.7 billion</td>
<td>110.1 billion</td>
<td>$1.6 billion</td>
</tr>
<tr>
<td>2016</td>
<td>$82.5 billion</td>
<td>81.7 billion</td>
<td>$0.8 billion</td>
</tr>
<tr>
<td>2017</td>
<td>$62.3 billion</td>
<td>61.5 billion</td>
<td>$0.8 billion</td>
</tr>
<tr>
<td>2018</td>
<td>$63.6 billion</td>
<td>62.3 billion</td>
<td>$1.3 billion</td>
</tr>
<tr>
<td>2019</td>
<td>$67.6 billion</td>
<td>66.3 billion</td>
<td>$1.3 billion</td>
</tr>
<tr>
<td>2020</td>
<td>$60.7 billion</td>
<td>59.4 billion</td>
<td>$1.3 billion</td>
</tr>
<tr>
<td>2021F</td>
<td>$74.9 billion</td>
<td>73.6 billion</td>
<td>$1.3 billion</td>
</tr>
</tbody>
</table>

Source: U.S. Department of Agriculture (Haver Analytics).
Note: F=USDA forecast data.
increased 77 percent (Chart 19). The increase in exports propelled strong price rallies of these commodities in the latter half of 2020 (Chart 20).

Despite improving agricultural market fundamentals, net farm income is forecast to decrease because of lower direct government farm payments. Farm incomes are expected to fall $10 billion (8.1 percent) in 2021 but remain above the historical average, according to the USDA's 2021 forecast.12

Government payments are expected to decline 45.3 percent on lower anticipated ad hoc disaster assistance for the pandemic. Stronger commodity prices and higher export levels are forecast throughout 2021 and should benefit U.S. crop and livestock producers and partially offset a drop in government farm payments. Cash receipts for crop producers are expected to increase $11.8 billion (5.8 percent) from 2020 with higher cash receipts for corn and soybeans more than offsetting lower receipts for fruits, vegetables, and cotton. Cash receipts for livestock products are forecast to increase $8.6 billion (5.2 percent) in 2021 with higher cash receipts for cattle, poultry, and hogs more than offsetting lower cash receipts for milk and eggs.

Strong farmland equity has helped farmers restructure loans to manage operating losses and replenish working capital. Farmland values typically account for the vast majority of total farm assets, making the stability of these values important to agricultural producers and their lenders. Nationally, real farmland values increased 81 percent from 2005 through 2015 (Chart 21). In the eight Midwestern states home

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to headquarters of the highest numbers of highly concentrated farm banks (collectively, 87 percent of all banks shown in the map above), changes in farm real estate values generally were even higher during that period.\(^{13}\)

Since 2015, changes in farmland values have moderated. In 2020, the USDA Farmland Values survey reported average U.S. farm real estate values were unchanged at $3,160 per acre, relative to 2019. In the eight Midwestern states, changes in farm real estate values in 2020 ranged from a 3.1 percent decline in Kansas to a 1.6 percent increase in Illinois. The stability in farmland values has been mainly due to low interest rates, a limited amount of farmland for sale, and ongoing demand for farmland.

Favorable farmland values have helped cushion farmers’ financial stress during periods of crop price volatility. Many farmers who had operating shortfalls in recent years have been able to restructure those shortfalls using their farmland equity. According to the USDA, farm sector equity is forecast to remain steady in 2021 with inflation-adjusted equity decreasing only modestly (.01 percent). The debt-to-equity ratio is forecast at 16.1 percent, which is unchanged from 2020 and moderate by historical measures.

Farm banks reported improved asset quality in 2020, but demand for agricultural loans weakened. In fourth quarter 2020, the median agricultural past-due and nonaccrual (PDNA) loan ratio decreased to 0.28 percent from 0.48 percent a year earlier. As of fourth quarter 2020, one in five institutions reported an agricultural PDNA ratio greater than 2 percent, while 7 percent of institutions reported a ratio greater than 5 percent (Chart 22). Farm banks with increased PDNA loans are not clustered by geography or by agricultural loan concentration levels.

Charge-offs rates also remained low (Chart 23). As of fourth quarter 2020, just 22.7 percent of farm banks reported agricultural loan charge-offs, a slight decrease from a year earlier. The median level of agricultural loan charge-offs at these institutions was 0.15 percent, which is also down slightly from one year before and well below levels seen during previous agricultural downturns. Past-due and charge-off ratios might have been higher in recent years if not for the debt restructurings facilitated by favorable farmland values.

A decline in loan demand last year led to a decrease in agricultural loans held by farm banks. More than half of farm banks reported a decline in agricultural loan volume in fourth quarter 2020 from one year earlier.

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\(^{13}\)The eight states with the highest number of highly concentrated farm banks are Illinois, Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota.
The median agricultural loan growth rate was negative 2.8 percent in fourth quarter 2020. The decline in agricultural loan volume mirrors results from several Federal Reserve Bank surveys that indicated widespread declines in agricultural loan demand (Chart 24).

The median agricultural loan to capital concentration ratio fell for the second consecutive year to 224 percent from 228 percent as demand for loans weakened.

The decline in the ratio was widespread, even among institutions with very high concentrations of agricultural loans. The number of these institutions—those with agricultural loans greater than 500 percent of capital—decreased to 26 (2.2 percent of farm banks) in fourth quarter 2020 from 58 (4.5 percent of farm banks) a year earlier.

Chart 24

Agricultural Loan Demand Has Fallen, Leading to a Decline in Agricultural Loan Growth

Median Year-Over-Year Agricultural Loan Growth Percent

Survey Responses Index value

Sources: FDIC and Federal Reserve District Agricultural Credit Surveys (Chicago, Kansas City, and Minneapolis).

Note: Data as of fourth quarter for each year. Agricultural loan growth is shown among farm banks. Survey responses from bankers, indicating whether loan demand was higher than, less than, or the same as a year earlier. Index values below 100 indicate a decline in loan demand.
Commercial Real Estate

- The pandemic challenged the CRE industry in 2020: lodging and retail sectors were hit hard early in the pandemic, and uncertainty emerged in other sectors.
- The pandemic’s progress and potential shifts in behavior and preferences may influence the outlook for CRE.
- CRE loans held by FDIC-insured institutions reached a record high at year-end 2020.
- CRE asset quality was stable at year-end 2020 as loan accommodations became part of the lending landscape.

In fourth quarter 2020, CRE loans held by FDIC-insured institutions totaled nearly $2.6 trillion.

- Community banks hold 28 percent (about $725 billion) of total CRE loans.
- Nearly 26 percent of all banks hold an elevated concentration of CRE loans (defined as total CRE loans above 300 percent of tier 1 capital and credit loss reserves for loans and leases; or acquisition, development, and construction (ADC) loans above 100 percent of tier 1 capital and credit loss reserves for loans and leases).

Regional Exposure to CRE Lending

Dots on map represent the 1,292 banks with a concentration of CRE loans, as defined above.

Source: FDIC.
Note: U.S. territories are not included in the map; one bank in Guam with a concentration of CRE loans is not shown.
Lodging and retail sectors were hit hard early in the pandemic. Hotels, restaurants, and retail stores closed at the pandemic’s onset, causing immediate stress across the lodging and retail sectors. The U.S. hotel occupancy rate dropped sharply from more than 60 percent pre-pandemic to less than 25 percent in April 2020. In luxury hotels, the occupancy rate dropped to single digits (Chart 25). While overall occupancy rates have improved from 2020 lows, occupancy remained well below pre-pandemic levels in early 2021.

The drop in hotel occupancy sharply reduced hotel revenues. Hotel revenues fell by 80 percent in April 2020 compared with the previous year but partially recovered by year end.14

Differentiation in the hotel sector is contributing to uneven performance. Urban and luxury properties are recovering more slowly than other hotel types such as extended-stay and hotels in regional, drive-to destinations. Improving performance in the latter two categories signals the emerging but slow return of leisure travel. The urban hotel sector continues to suffer from the slower return of corporate travel, an important source of revenue for urban hotels. While leisure travel accounts for the largest share of room nights, group and corporate travel account for roughly two-thirds of hotel revenues. The outlook for leisure travel may improve once a large share of the population is vaccinated, but the resumption of corporate travel to pre-pandemic levels is uncertain as companies re-evaluate their travel needs. Industry reports suggest that some urban hotel markets may not return to pre-pandemic revenue levels for years.

In the retail sector, the pandemic accelerated the long-term challenge that online shopping poses to brick-and-mortar stores. E-commerce has been eroding brick-and-mortar market share for years, a dynamic that intensified during the pandemic. Online retail sales grew 32 percent in 2020, well above the 17 percent growth in 2019. As of fourth quarter 2020, online retail sales accounted for more than 14 percent of all retail sales, up from 10 percent in fourth quarter 2018.

As consumer foot traffic dropped during the pandemic, the brick-and-mortar retail sector further weakened. Despite re-openings late in the year, 2020 marked the fourth consecutive year of elevated retail store closings.15 According to research firm Coresight Research, store closures are expected to rise again in 2021.16

Many office markets are facing weak conditions, as firms responded to the pandemic by allowing employees to work from home. Most companies are re-evaluating their office space needs and offering the

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15 Coresight Research. Annual store closures ranged from 4,300 in 2016 to 8,700 in 2020.
16 Ibid.
ability to work from home. Widespread work-from-home has led firms in several high-cost and tech-focused markets to offer some of their office space for sublease, enabling them to trim their office footprint. San Francisco, New York, and Seattle each have large amounts of space available to sublease. Some firms have elected not to renew leases, or to renew for shorter terms. Weakness has been most apparent in large, higher-cost, densely-populated, gateway markets that rely heavily on public transportation. Washington, D.C., Los Angeles, and Boston are among the large markets with the sharpest increases in vacancy rates and growing sublease availability. With few exceptions, lower-cost smaller markets have not been affected as severely.

Real estate firm CoStar projects that, in aggregate, both the volume and the share of office space returned to the market as a result of the pandemic will exceed that of the Great Recession. Vacancy rates are expected to increase but recover more quickly in this cycle than in the Great Recession because of the underlying strength of the current economy. The typical long-term nature of office leases may have forestalled additional strain in the office sector. As current leases become eligible for renewal, the office landscape may change in some markets as firms re-evaluate their space needs and remote work policies.

Effects of the pandemic across multifamily properties nationwide was limited in 2020, but the risk of excess supply remains a concern in some markets. Nationally, the percentage of apartment rent payments made by the end of the month declined only slightly, from 96 percent in December 2019 to 94 percent in December 2020. Some multifamily properties may become strained if the share of timely rent payments declines. Employment in the retail sector and the leisure and hospitality sector, which are among the lowest-paying sectors, declined disproportionately during the pandemic. Lower-income individuals tend to rent. Multifamily construction eased in 2020, but excess supply remains a challenge in some markets. Over the past six years, the pace of construction of multifamily properties was brisk. Although the pipeline of units under construction declined last year, it remained elevated on a national level (Chart 26).

Much of the supply added in the past year is in the South and the West, regions with strong population growth. New supply is expected to be more widespread, including in the Northeast, where the population in many states is growing slowly or declining. Significant supply growth in recent years placed downward pressure on rents. Multifamily rent growth slowed in almost half of the markets nationwide between fourth quarter 2019 and fourth quarter 2020, and rents declined in more than 9 percent of markets.

The industrial sector benefited from increased demand for space to support e-commerce. For most of the past decade, demand for industrial space exceeded supply. This imbalance helped push the U.S. industrial property vacancy rate to a cycle low 4.7 percent in 2018. Increased e-commerce activity during the pandemic contributed to a record level of leased industrial space at year-end 2020. While demand for industrial space increased in fourth quarter 2020, supply also increased and industrial vacancies inched up nationwide. Markets with a large amount of industrial space under construction are primarily located in the South and West.

The pandemic’s progress and potential shifts in behavior and preferences may influence the outlook for CRE across property segments. CRE prices declined at the onset of the pandemic and remained lower than pre-pandemic levels across most property types at year-end 2020 (Chart 27). According to CoStar, sales across all property types increased by year-end 2020 from lows earlier in the year.

Because changes in CRE tend to lag changes in the broader economy, it is possible that the worst effects of the pandemic have yet to be seen. It is also possible that the widening circle of people vaccinated will help the CRE sector avoid some of the more pessimistic forecasts.
Multifamily Construction Declined in 2020 but Remains Elevated

Chart 26

Construction Underway as a Share of Inventory
Percent

Source: CoStar.
Note: Data are quarterly through fourth quarter 2020. Multifamily is measured in units. The other property types are measured in square feet.

Commercial Real Estate Property Prices Have Remained Relatively Stable Since Early 2020, Except in the Industrial Sector

Chart 27

Indexed Price Change From Onset of the Pandemic
Feb. 2020 = 100

Source: Green Street Advisors.
Note: Data are monthly as of December 2020.

made by industry experts at the onset of the crisis. Ultimately, conditions in the various types of CRE will reflect many factors including the pandemic’s effects on consumer shopping habits, business and leisure travel preferences, companies’ use of remote work and preferred locations of office space, housing preferences, and the pace of economic recovery.

CRE loans held by FDIC-insured institutions reached a record high at year-end 2020. FDIC-insured institutions remain heavily invested in CRE loans. Aggregate CRE loans reached a record high in 2020, and CRE lending represents the largest loan category in more than 40 percent of banks. FDIC-insured institutions held nearly $2.6 trillion of CRE loans as of fourth quarter 2020, well above the prior CRE cycle’s expansionary peak of $1.9 trillion in fourth quarter 2008. Through fourth quarter 2020, FDIC-insured institutions experienced 33 consecutive quarters of year-over-year CRE loan growth. Nonfarm nonresidential CRE loans remain the largest segment of CRE loans at more than 60 percent
of the total. ADC loans—historically, a riskier category of CRE loans—grew slightly in 2020 and totaled $385.9 billion at the end of the year, nearly 40 percent below the 2008 peak (Chart 28). Nearly a quarter of the banking industry’s total CRE loan volume, $627.7 billion, is held at institutions in the Northeast. Institutions in the Southeast and in the North Central regions each hold 17 to 18 percent of the banking industry’s total CRE loan volume. FDIC-insured institutions are further exposed to CRE through their holdings of commercial mortgage-backed securities (CMBS) (see inset box on next page).

While banks do not provide data on CRE sector-specific risk exposures in their quarterly Consolidated Reports of Condition and Income (Call Reports), industry sources suggest that regional and local banks, many of which are similar in profile to community banks, are active lenders to multiple CRE sectors. According to real estate firm Real Capital Analytics, regional and local banks’ lending market share has been significant in recent years in several property types, including industrial and retail.26 Although CRE loan balances ended 2020 at a record high, CRE loans as a percent of capital declined in 2020 and remained below the 2008 peak.27 As of fourth quarter 2020, the median ratio of CRE loans to capital nationwide was about 181 percent, down slightly from 185 percent a year earlier and below the 214 percent high reached in the prior cycle. Institutions in the West had the highest median at 283 percent in fourth quarter, followed by institutions in the Northeast at 235 percent.

The share of banks with elevated exposure to CRE loans relative to capital has declined from the 2008 peak. At year-end 2020, nearly 26 percent of FDIC-insured institutions held an elevated concentration of CRE loans, slightly below the share at year-end 2019 and down considerably from 39 percent at the 2008 cycle peak. Institutions in the South accounted for the largest portion (24 percent) of the 1,292 institutions with elevated CRE concentrations in fourth quarter 2020.

**CRE lending remains important to community banks.** Community banks held 28 percent of CRE loans but only about 16 percent of total loans as of fourth quarter 2020. The volume of CRE loans held by community banks approached $725 billion at year-end 2020, up slightly from the previous year and nearly 20 percent more than at the industry’s 2008 peak. In fourth quarter 2020, one-quarter of community banks held an elevated concentration of CRE loans to capital, down from 37 percent in fourth quarter 2008. Additional information about community banks’ role in the U.S. CRE lending landscape and exposure to various property types can

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**Chart 28**

**Commercial Real Estate Lending at FDIC-Insured Institutions Continues to Grow**

![Chart](image)

Source: FDIC.

Note: Quarterly data, fourth quarter 2007 through fourth quarter 2020.

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26FDIC analysis of Real Capital Analytics data.
27For this analysis, capital is defined as tier 1 capital and credit loss reserves for loans and leases. An elevated concentration of CRE loans is defined as total CRE loans above 100 percent of capital, or ADC loans above 100 percent of capital.
CMBS Was Strained in 2020

CMBS asset quality measures weakened sharply in first half 2020 but improved through the rest of the year. Delinquency rates in the loans underlying CMBS spiked in May 2020. The overall delinquency rate among non-agency CMBS loans surpassed 10 percent in June 2020 and ended the month just shy of the all-time high reached in July 2012 following the Great Recession. However, following the June 2020 peak, the CMBS delinquency rate declined for six consecutive months and ended 2020 just under 8 percent, still well above the 2019 level (see chart).

Similar to CRE market conditions, weakness in the CMBS market was largely property-type specific. Lodging and retail loans were challenged immediately, while other property sectors experienced only modest weakness through 2020. Decline in travel and changes in consumer spending habits against the backdrop of public health measures contributed to the weakness in lodging and retail loans. Other factors such as the work-from-home paradigm, demographic trends, and fiscal stimulus could take longer to filter through other property types.

FDIC-insured institutions are exposed to CRE through holdings of CMBS, which totaled $487.6 billion at year-end 2020. Approximately 39 percent of FDIC-insured institutions hold CMBS, although most hold small portfolios relative to capital.
be found in Chapter 4 of the FDIC’s 2020 Community Banking Study.28

CRE asset quality was stable at year-end 2020 and more favorable than during the recessionary period in the previous CRE cycle. The median CRE loan delinquency rate among FDIC-insured institutions was 0.41 percent in fourth quarter 2020, well below the first quarter 2010 peak of 3.85 percent. At year-end 2020, the median CRE noncurrent rate was 0.12 percent, up only slightly from a year earlier and well below the prior cycle’s peak of 2.27 percent.

In 2021, institutions holding CRE loans face significant possible challenges, including weakened cash flows for some properties and potentially higher interest rates and debt servicing costs for some CRE borrowers. FDIC-insured institutions have been encouraged to work prudently with stressed borrowers during the pandemic. In doing so, institutions have embraced an array of loan accommodations in their CRE loan portfolios. These actions may help CRE borrowers navigate the pandemic but can complicate lenders’ ability to assess asset quality and potentially defer asset quality deterioration. Borrowers who request repeated or prolonged loan accommodations may be higher risk. Loan accommodations and other forbearance measures may obscure traditional measures for loan performance metrics and offsite risk identification. Banks also faced intense competition for higher-quality CRE loans from other banks and from nonbank lenders during the strong economic environment that preceded the pandemic. The effects on CRE loans underwritten during that period may have yet to manifest in asset quality measures.

Consumer Debt

- Government programs helped support household balance sheets and consumer loan performance during the pandemic.
- Consumer loan volumes declined as households pulled back on spending in 2020.
- Consumer conditions may be a key source of credit risk, especially if support for consumers runs out while economic conditions remain weak.

Consumer loans held by FDIC-insured institutions totaled $1.7 trillion as of fourth quarter 2020.

- Community banks hold 3.7 percent ($65 billion) of total consumer loans.
- Concentration in the industry remains low; 4.3 percent of all banks hold a high concentration of consumer loans above 100 percent of capital (tier 1 capital and credit loss reserves for loans and leases).
- Exposure to consumer lending is not concentrated in any region of the country.

Regional Exposure to Consumer Lending

Dots on map represent banks with total consumer loans above 100 percent of capital.

Source: FDIC.
Note: U.S. territories are not included in the map; two banks in Puerto Rico and one bank in Guam that have a concentration of consumer loans are not shown.
Government support programs helped boost household income growth in 2020. U.S. personal income growth rose to 14 percent from a year earlier in April 2020, up from 3 percent in December 2019 (Chart 29). The increase was almost entirely due to pandemic relief in the form of government stimulus programs, such as the Coronavirus Aid, Relief, and Economic Security (CARES) Act. The CARES Act provided direct economic impact payments of up to $1,200 per adult and $500 per child under 17 years old for individuals who made less than $99,000 per year and joint filers who made less than $198,000 per year. From the end of March through June 2020, the Internal Revenue Service made 159 million of these payments to qualifying individuals. A majority of households who received an economic impact payment reported using or planning to use the payment for expenses, while 13 percent reported using it to pay off debt.

The CARES Act also expanded and extended unemployment insurance benefits and created an unemployment assistance program that covered workers not traditionally covered by unemployment insurance. In addition, the federal government paid $600 per week in unemployment insurance on top of the standard state-run unemployment insurance system.

In March 2021, a fifth COVID-19 relief bill was signed that included a third round of economic impact payments and continued the expanded unemployment insurance benefits, both of which boosted household income in first quarter 2021.

Consumer lending fell in 2020 as credit card loans declined. In fourth quarter 2020, FDIC-insured institutions held about $1.7 trillion in consumer loans, down 5.1 percent from a year earlier (Chart 30). Credit card loans comprise about half of consumer loans at banks, with the rest split between auto loans and other personal loans. During the pandemic, credit card loan balances declined from the 2019 level as consumers cut back on spending typically charged on credit cards, including restaurants, hotels, travel, and general retail. The growth rate of auto and personal loans slowed last year, but loan volumes remained above 2019 levels.

Following the onset of the pandemic, banks tightened lending standards for consumer loans as the pandemic pushed the economy into a recession. On net, more than 70 percent of banks tightened lending standards for credit cards in second quarter 2020, and more than half tightened standards for auto loans and personal loans. On net, banks loosened underwriting standards across consumer lending segments in the fourth quarter, but standards remained tighter than before the pandemic.

Consumer loan performance was stable in 2020, partly because of forbearance programs. Most banks offered some form of accommodation for customers affected by the pandemic, and these forbearance programs helped limit consumer loan delinquencies last year. Noncurrent rates on credit cards and other personal loans declined in 2020, while the noncurrent rate for auto loans rose only slightly (Chart 31). The noncurrent rates for credit cards and personal loans ticked up in fourth quarter

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29Payments were $1,200 per adult for adults who made less than $75,000 (joint filers who made less than $150,000), and phased out for people who made between $75,000 and $99,000 per year ($150,000 to $198,000 for joint filers). The Pandemic Unemployment Assistance program made unemployment insurance payments available to self-employed people, gig workers, and contract workers for the first time.


31Data from https://tracktherecovery.org/.

2020 from third quarter 2020 but were below fourth quarter 2019 levels. Net charge-off rates declined across all consumer loan types. In fourth quarter 2020, the quarterly net charge-off rate on credit card loans was near historic lows.

In addition, forbearance programs for federally backed mortgages and federal student loans have likely supported performance of other consumer loans during 2020. The federal government offered forbearance programs on all government-backed mortgages and placed most student loans into deferment in 2020. Eliminating required payments on these loans may have allowed borrowers to repay other loans such as consumer loans held by banks.

The outlook for consumer credit remains a key source of uncertainty. While forbearance and income support programs helped maintain asset quality in 2020, the banking industry may experience deterioration in consumer credit if these programs run out while economic conditions remain weak.
Energy

- The pandemic-induced decline in oil demand, substantial oversupply from a production policy impasse within the OPEC+ coalition, and near-record U.S. production led to sharply lower oil prices in second quarter 2020.
- Poor operational performance and escalating environmental, social, and governmental risks contributed to capital scarcity for oil and gas producers.
- Banks with significant exposures to the energy market remained resilient to these market challenges.

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 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.

The oil and gas industry was among the sectors most hurt by the pandemic. Oil demand fell sharply worldwide as lockdowns severely limited mobility and overall economic activity. Domestic oil demand plummeted in April 2020 causing a year-over-year decline of 27.7 percent and the lowest consumption since May 1983. West Texas Intermediate (WTI) crude oil prices began 2020 near $60 per barrel and fell to a monthly average price of $16.55 per barrel by April.

In response to weak price signals, the number of active drilling rigs in the United States fell to the lowest level since records started in 1973, and production declined from a record 12.9 million barrels per day in November 2019 to 10 million barrels per day in May 2020. Notwithstanding the severe but short-lived declines following Hurricane Katrina and the onset of the financial crisis in September 2008, this was the most abrupt and largest U.S. oil production decline in modern history.

Global oil supplies reached record levels and prices fell rapidly, particularly in March and April 2020, because of simultaneous shifts in supply and demand. As the pandemic’s effects reduced the demand for oil, global inventories swelled from a combination of record production by the United States and ramped-up production by Saudi Arabia and Russia, the two leading OPEC+ members who disagreed on the coalition’s production policy.

Resumption of commercial and industrial activity in the second half of 2020 and consequential gains in mobility translated to greater demand for oil. Market oversupply declined after the OPEC+ coalition agreed to substantial production quotas and U.S. production fell. When prospects for a COVID-19 vaccine began to crystalize, swollen inventories began to subside, rig counts increased, and WTI crude spot prices began to rally. Collectively, these factors contributed to a 36 percent increase in WTI spot prices during the last two months of 2020.

Mining and logging employment has been among the weakest industry sectors since the onset of the pandemic. Before the pandemic and the subsequent plunge in oil prices, most labor markets in oil-concentrated states had solid employment growth and low unemployment rates.33 All but one of these states (Wyoming) were at or near their historic low unemployment rates at year-end 2019. However, job losses rose quickly with the pandemic’s onset, and all but one oil-concentrated state (Wyoming) reached its record high unemployment rate in April 2020 or soon thereafter. Nationwide, the mining and logging sector lost 107,500 jobs in 2020; 81 percent of those losses occurred in oil-concentrated states. During 2020, employment in the sector declined 14.0 percent, second only to the leisure and hospitality sector. For oil-concentrated states, the decline was more pronounced at 27.6 percent year over year.

33 For this analysis, oil-concentrated states are Alaska, Colorado, Louisiana, New Mexico, North Dakota, Oklahoma, Texas, and Wyoming. Together, these states produced 77 percent of U.S. oil production in November 2020.
The industry responded to the rapid decline in oil prices by pulling back on drilling activity, which contributed to deep job losses for the oil and gas and support services subsectors (Chart 32). The broader U.S. labor market recovered more than 55 percent of the jobs lost since the April low by year-end 2020; however, the oil and gas extraction and support activities subsectors continued to lose jobs throughout 2020.

Financial performance of oil and gas firms—particularly for shale oil producers—has been poor, and challenges continue. Shale producers accounted for almost 65 percent of U.S. production in 2020 and all of the growth in U.S. oil production over the ten years ending in 2020. Shale oil production initially has high production rates but needs a continual flow of new wells to replace rapid production declines of existing wells. Shale production is therefore a capital intensive operation that requires more funding to drill new wells, grow reserves, and replenish production.

The high leverage common to a shale producer’s business model also raises vulnerabilities to significant oil market volatility, which is historically associated with oil and gas markets. Even though U.S. shale oil production grew more than 960 percent during the past decade to record levels, this business model produced extremely weak financial performance. Among the 11 sectors of the S&P 500 Index, energy continued a trend as the worst performing sector in 2020, and exploration and production (E&P) firms fared particularly poorly (Chart 33).

The energy sector represents the largest share of high-yield debt. A year-end 2020 Fitch Ratings report shows the energy sector accounted for 15.5 percent of the high-yield debt market followed by the banking and finance sector with a 9.2 percent market share. The energy sector’s 14 percent high-yield bond default rate for 2020 was second highest of any sector. Given its size, the energy sector dominated the dollar volume of defaults. Last year, the sector accounted for 41 percent of the default volume.34

Weak financial performance, high leverage, and low oil prices also prompted an escalation in North American oil and gas producer bankruptcies in 2020. Approximately $53.8 billion of energy debt was taken into bankruptcy in the 11 months through November 2020, the highest amount since 2016 and more than twice that of 2019.35

When nascent signals of improving market conditions emerged late in 2020, the outlook for the energy

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sector improved. The Fitch Ratings forecast for high-yield energy debt defaults declined from 11 percent in December 2020 to 4 percent in March 2021. The Federal Reserve Bank of Dallas fourth quarter 2020 Energy Survey also notes that E&P firms are planning to expand capital spending in 2021.

Although measuring direct bank exposure to oil and gas is difficult, examiner assessments conclude that few banks have extensive direct credit exposure to the energy sector. E&P operations today are primarily financed in the capital markets, and bank exposure to oil and gas—principally at larger banks—showed declines in 2020. Nevertheless, while local banks may face indirect effects of weakness in the energy sector, community banks operating in states with oil-reliant economies have shown resilience to oil market downturns.

Although it may be too early to fully assess the current cycle, asset quality deterioration in geographies that rely on the energy sector has been mild, despite weak labor market fundamentals. At fourth quarter 2020, the past-due loan rate for community banks headquartered in oil-reliant states was 1.1 percent, only slightly above the rate for all other states (Chart 34). The median C&I loan past-due rate for community banks in oil-concentrated states was slightly above (30 basis points) banks in other states. Indeed, 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.

Insights of low oil price effects on large banks are evident in the Shared National Credit (SNC) report for the first and third quarter 2020 reviews. The SNC program assesses large commitments in excess of $100 million and shared by multiple regulated financial institutions. As an industry significantly affected by the pandemic, oil and gas credits were a focal area of the report. Notably, the share of all oil and gas commitments that were criticized increased from 10.7 percent in 2019 to 23.3 percent in 2020. The report also commented that the increase in classifications at U.S. banks and foreign bank offices is largely due to oil and gas and other COVID-19 impacted obligors that trend to be more widely held by banks.

The energy transition trend is accelerating and is becoming an increasingly important issue across the energy sector. Opportunities and risks are also accelerating for stakeholders endeavoring to transform the global energy sector from fossil fuel production and consumption to renewable energy sources. In the long term, this means that oil- and gas-concentrated areas could play a smaller role in total energy production and could therefore see erosion of the sector’s contribution to their economies. Similarly, areas with growing renewable energy production are positioning to take advantage of decarbonization trends. Cost efficiencies are raising prospects for transitioning to renewable power sources; however, intermittency and battery technology are issues that need solutions.

Energy transition could have implications for lenders. Banks are taking climate change and environmental, social, and governmental (ESG) risk mitigation into consideration. Understanding changes in policy, technology, and investor sentiment as they relate to ESG risk have become increasingly important as lenders

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36 For comparison, C&I past-due rates exclude PPP loans that were first booked in March 2020. Including the large volume of these loans, that are forgivable and federally guaranteed, would otherwise dilute past-due ratios of existing C&I loans.

adapt policy guidance and risk identification, especially for those with geographic or financial exposure to traditional energy resources.

Although market conditions have improved since fourth quarter 2020, risks of continued market volatility and longer-term transitional challenges remain. Supply restraint decisions by OPEC+ and U.S. producers, prospects for further pandemic-related lockdowns, the pace of global post-pandemic recovery, and delayed distribution and efficacy of vaccines are near-term risks that could affect the global economy and energy industry performance. For oil and gas firms, poor financial performance, volatile market prices, and building momentum of energy transition to decarbonize energy supplies each represent significant long-term challenges. The combination and variety of these risks suggest that volatility in the energy sector will remain elevated and pose challenges to the sector and its lenders.
Housing

- Housing activity recovered strongly in 2020; single-family sales reached a 14-year high after a sharp drop in activity at the onset of the pandemic.

- Loan performance metrics of 1–4 family residential mortgage loans at FDIC-insured institutions weakened slightly in 2020.

- Increasing competition from nonbanks could pressure bank mortgage lenders going forward.

Residential loans held by FDIC-insured institutions totaled nearly $2.5 trillion as of fourth quarter 2020.

- Of the $2.5 trillion in residential loans, community banks hold 17 percent ($431 billion).

- Twelve percent of all banks hold a high concentration of residential loans, with residential loans above 300 percent of capital (tier 1 capital and credit loss reserves for loans and leases).

- Exposure to the residential market, in terms of total residential loans held, is highest in the banks headquartered in the Northeast.

Regional Exposure to Residential Lending

Dots on map represent banks with total 1–4 residential loans above 300 percent of capital.

Source: FDIC.
Housing sales were resilient during the pandemic following early signs of stress. Home sales declined abruptly in the first few months of the pandemic as mandatory lockdowns and concern about the spread of the virus contributed to a sharp reduction of activity. In May, total single-family home sales had declined 25 percent on an annual basis, the largest annual decline in approximately ten years. In June, existing home sales sharply rebounded and trended upward for the second half of the year (Chart 35). By fourth quarter 2020, existing home sales, which account for most total single-family home sales, were up 23 percent from fourth quarter 2019 and new home sales were up 27 percent. Although existing and new home sales remained below prior peaks reached in 2005, pandemic lows were not as severe as those in the aftermath of the 2010 housing crisis.

The high level of home sales reflected strong demand for single-family homes that was due to a growing desire for more space to accommodate remote work, a shift in homebuyer preferences from densely populated urban areas to suburban markets, and record low mortgage rates. Home buyers and sellers also adopted virtual showings instead of traditional on-site visits. Going forward, demographics may contribute to increased demand for homeownership, as forecasts suggest that the millennial and Generation X cohorts will account for a growing share of household formations and home purchases.

As home sales climbed last year, the supply of homes for sale fell to a record low. The inventory of homes for sale has trended lower since the last housing downturn and was well below a six-month supply, an industry benchmark needed for a balanced market. The downward trend in inventory before the pandemic may be attributed to low levels of construction and a low inventory of existing homes for sale. Although the inventory increased in second quarter 2020 as sales temporarily slowed, inventory as measured by months of homes for sale remained well below the historical level by year end. By fourth quarter, inventory had declined to a record low 2.1 months of supply, down nearly 40 percent from fourth quarter 2019 and the lowest level on record (Chart 36).

New home construction increased in the second half of 2020 nationwide (Chart 37). By fourth quarter 2020, total single-family housing starts were nearly 30 percent higher than one year earlier, as builders responded to the sudden increase in the demand for single-family homes.
The largest percentage annual increase was in the West, which was already producing more homes before the pandemic in response to in-migration; the smallest increase was in the Northeast, where growth was lagging before the pandemic from comparatively slower population growth.

Home prices rose sharply in 2020 fueled by strong demand, limited supply, and low mortgage rates. Home prices rose 9.4 percent on an annual basis in fourth quarter 2020, outpacing the 3.4 percent growth in fourth quarter 2019 and the largest increase in six years. Home prices rose across all states but increased most in Idaho, Arizona, and Utah, where population growth has been strong.

Despite positive home price growth across all states, three metros saw home prices decline annually through fourth quarter 2020: San Francisco, California; San Rafael, California; and Midland, Texas. The largest
The decline was in San Francisco, followed by smaller, marginal declines in nearby San Rafael, and energy-focused Midland. The San Francisco Bay Area is home to many high-tech companies that have embraced the transition to remote work brought on by the pandemic. The ability to work remotely contributed to an exodus of homeowners from high-cost San Francisco to more affordable locations.

In many areas, home price gains have outpaced income growth, which reduced affordability. First-time home buyers may be most affected by higher home prices, particularly in traditionally more affordable locations that have become highly desirable since the pandemic. As the demand for homes in locations with more space increased during the pandemic, housing affordability for established homeowners also is being strained. The potential for higher mortgage rates from last year’s record lows also may hamper home affordability.

The volume of 1–4 family residential loans increased at a slower rate and was below levels reported during the last cycle. Nationally, insured banks reported $2.2 trillion in 1–4 family residential loans in fourth quarter 2020, a nominal increase from a year earlier. Although positive, the most recent increase was slower than the 1–4 family residential loan growth reported in previous quarters. The sale of 1–4 family mortgages by banks and an increased presence of nonbanks in the mortgage market contributed to lower growth last year.

The concentration of 1–4 family residential loans to capital declined last year to 129 percent, the lowest level in 30 years. The median concentration ratio continued to be lower among noncommunity banks than community banks during the quarter. The median concentration of 1–4 residential mortgage loans for community banks was 132 percent of capital, down from the previous year and considerably below the 2009 peak of 164 percent. Community banks in the West reported the lowest median concentration of 1–4 family residential mortgages to capital (72 percent) in fourth quarter 2020, while community banks in the Northeast reported the highest median concentration (261 percent). The median concentration of 1–4 family residential loans to capital for community banks in the Northeast has been historically higher, reflecting a concentration of mutual savings banks that focus on residential lending (see inset box).

Construction lending, a traditionally higher-risk loan segment, has declined. The volume of 1–4 family residential construction and development (C&D) loans for the industry was down 3.1 percent to $77 billion as of fourth quarter 2020 from a year earlier and remains significantly below the $186 billion industry peak in the previous cycle. Similar to overall 1–4 family residential concentrations, institutions reported lower concentration of 1–4 family residential C&D loans to capital in 2020. As of fourth quarter 2020, only 3.6 percent of all institutions nationwide held 1–4 family residential construction loans at 50 percent or more of capital, down significantly from nearly 14 percent at the 2008 peak. Trends were similar at the regional level; the largest declines were at institutions headquartered in the South and West (Chart 38).

Loan performance metrics of 1–4 family residential mortgage loans weakened slightly in 2020, while the residential construction loan past-due rate remained

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**Community Banks Continue to Face Competition for 1–4 Family Residential Loans**

To compete with other banks, community banks have aggressively priced 1–4 family residential loans, particularly community banks headquartered in metropolitan areas. Historically, 1–4 family residential loan yields among metro-based community banks have trailed those in non-metro areas given the heightened level of competition in metro areas versus rural locations. As of fourth quarter 2020, metro-based community banks reported a median 1–4 family residential loan yield of 4.95 percent compared with 5.29 percent for non-metro-based community banks. The difference in yields between the two groups increased in 2020 from prior years.

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45 Ibid. Metro division data for San Francisco and San Rafael, California, and metro area data for Midland, Texas.
46 One-to-four family residential loans exclude revolving and open-end loans.
As of fourth quarter 2020, banks reported an aggregate 1–4 family mortgage loan past-due rate of 3.4 percent, up 71 basis points from a year earlier and the sixth consecutive quarterly increase. While trending up modestly, the past due rate for 1-4 family residential C&D loans industry-wide remained low in 2020 and was well below the peak during the Great Recession (Chart 39). The increase in the past-due rate was driven by higher noncurrent loan balances in the 1–4 family mortgage portfolio, including rebooked Government National Mortgage Association (Ginnie Mae) loans primarily among the industry’s largest institutions. Excluding the largest institutions, the year-over-year increase in the 1–4 family noncurrent rate last year was the largest increase since 2011, but the rate remains much lower than the peak during the Great Recession.

Asset quality measures reported by FDIC-insured institutions were muted by various national mortgage forbearance moratoria and other federal support programs available to mortgage holders affected by the pandemic. The number of mortgages in forbearance across the nation declined considerably after spiking during the pandemic. An estimated 2.5 million mortgages, 4.9 percent of all mortgages nationally, were in forbearance as of March 2021, down significantly from the peak of 4.3 million, 8.6 percent of mortgages, nearly a year earlier. The decline was due to an increased number of mortgages exiting forbearance and reduced new entrants.

Strong mortgage loan origination volume contributed to higher mortgage-related revenues in 2020. As mortgage rates reached record lows and home sales grew during the year, banks that conduct mortgage lending reported higher revenues on increased 1–4 family loan originations (originations) and loan sales (sales). These banks originated $967 billion in 2020, up 30.3 percent from 2019. Similarly, banks sold $1.1 trillion of mortgage loans, up 34.5 percent from 2019. Both volumes are the highest since 2013.

The growth in both originations and sales demonstrates that banks took advantage of increased refinancing activity to generate revenue during a period of pandemic-induced economic stress. In 2020, annual noninterest income from mortgage banking activity for all banks grew 66 percent from 2019.
Nonbanks continued to increase their presence in the mortgage market. Among the top 50 mortgage lenders, nonbanks accounted for 74.4 percent of mortgage originations in fourth quarter 2020, up sharply from a 49.7 percent share in fourth quarter 2016. Similarly, among the top 50 mortgage servicers in fourth quarter 2020, nonbanks serviced 51.3 percent of loans, up from 37.9 percent in fourth quarter 2016. The shift in market share evolved as some banks exited mortgage servicing and origination on business decisions to limit exposure to the housing market after the 2007 housing crisis.

Nonbanks have a competitive edge in mortgage origination and servicing over banks, particularly community banks, thanks to specialization and the use of technology to improve efficiency and profits and less comprehensive regulatory oversight relative to banks. The shift in mortgage activity away from banks, combined with a potential drag on sales growth from the low inventory of homes for sale, could be a headwind to 1–4 family residential loan growth among banks in the coming year.

Gauging mortgage loan performance remains challenging. One year after the start of the pandemic, federal programs continued to help many homeowners and insulate bank mortgage asset quality. The ability of homeowners to service their mortgages once support programs end will be a key factor in the outlook for asset quality.

Data suggest that mortgage underwriting industry-wide has been more disciplined than in the last housing cycle. In fourth quarter 2020, more than 70 percent of all mortgages originated were to borrowers with credit scores of 760 or above, well above the 24 percent leading up to the previous downturn. In addition, only 1.8 percent of mortgages originated in fourth quarter 2020 were to borrowers with credit scores below 620, improved from the high of more than 15 percent leading into the Great Recession. The rise in home prices last year helped reduce the share of homes with negative equity to 2.8 percent in fourth quarter 2020, down from the 2009 peak of 26 percent. With equity in their home, some challenged residential mortgage loan borrowers may choose to sell instead of defaulting on their mortgage.

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Leveraged Lending and Corporate Debt

- Significant disruptions in corporate debt markets early in the 2020 pandemic were curtailed by Federal Reserve actions that helped to restore stability to bond and leveraged loan markets.
- Corporate debt was elevated before the pandemic and increased further as bond issuance surged, pushing corporate debt-to-GDP to record numbers.
- Continuing challenges from the pandemic and high levels of debt could cause corporate borrowers in vulnerable sectors to default on their debt obligations.
- Banks remain exposed to risks in corporate debt markets both directly and indirectly.

Banks are exposed to risks in corporate debt and leveraged lending though asset holdings and underwriting activities:

- In fourth quarter 2020, U.S. depository institutions held almost $1 trillion in syndicated loans.
- Bank holdings of collateralized loan obligation (CLO) securities backed by leveraged loans totaled at least $101 billion in fourth quarter 2020.
- In 2020, banks earned over $11 billion in non-interest income from investment banking, underwriting, and advisory activities, which include underwriting corporate debt issuance and CLOs.

Corporate debt markets experienced substantial turmoil in early 2020. The COVID-19 pandemic and ensuing economic downturn led to severe disruptions in corporate debt markets in the first half of 2020. Corporate bond spreads spiked sharply in March 2020, reaching their highest levels since the Great Recession (Chart 40).\textsuperscript{55} Leveraged loan prices collapsed in March, with distressed ratios increasing nearly six-fold from their level at the start of the year. Issuance of high-yield bonds and leveraged loans used to finance riskier borrowers fell substantially.\textsuperscript{56} Amid higher borrowing costs in debt markets, corporations drew heavily on their lines of credit at banks and other financial institutions; drawn syndicated revolving credit facilities rose by almost 60 percent in first quarter 2020.\textsuperscript{57}

Federal Reserve intervention mitigated corporate debt market stress. These market disruptions along with the escalating economic downturn in early 2020 led to the implementation of Federal Reserve programs that provided support to corporate debt markets. Following the introduction of these programs, corporate bond spreads tightened significantly. Corporate debt market issuance rose sharply as markets stabilized. Both high-yield and investment-grade bond issuance ended 2020 about 60 percent above 2019 levels (Chart 41).\textsuperscript{58}

Corporations used this new debt for a variety of purposes including to refinance existing bonds and loans and raise additional funds.

Corporate debt was already historically high and rose even higher during the pandemic. The 2020 disruptions to corporate debt markets and the ensuing rise in corporate borrowing following the Federal Reserve’s market stabilization efforts came after a decade of rising corporate debt levels. Before the pandemic, corporate debt as a share of GDP was already at an all-time high. The rapid drop in GDP in 2020 along with rising debt issuance pushed the corporate debt-to-GDP ratio even higher (Chart 42). As a share of pre-tax profit, corporate debt in second quarter 2020 reached its highest level since 2002 but quickly declined to pre-recession levels.

\textsuperscript{55} ICE BofA High Yield Index option-adjusted spread and ICE BofA U.S. Corporate Index option-adjusted spread.
\textsuperscript{56} S&P Global Market Intelligence, Leveraged Commentary and Data, Interactive High-Yield Bond Report and Leveraged Loan Interactive Volume Report.
\textsuperscript{57} Board of Governors of the Federal Reserve System, Enhanced Financial Accounts.
\textsuperscript{58} S&P Global Market Intelligence, Leveraged Commentary and Data, Quarterly Leveraged Lending Review, Fourth Quarter 2020; and S&P Global Market Intelligence, Leveraged Commentary and Data, Leveraged Loan Interactive Volume Report.
by third quarter 2020. Even before the pandemic, the FDIC and other regulators identified elevated corporate debt as a source of risk to the banking system and the broader economy. Higher debt levels can make businesses more vulnerable in the event of an increase in borrowing costs or a decline in profits, both of which occurred in 2020. Subsequently, corporate defaults reached the highest level since 2010.

Risks in leveraged loan and corporate bond markets remain, though some risk measures have improved from previous years. Market participants estimate that default rates will remain elevated for corporate bonds and leveraged loans throughout 2021 and into 2022. In leveraged loan markets, measures of borrower leverage moderated slightly in 2020 on average but remain at high levels. Falling interest rates helped improve cash flow ratios (earnings relative to interest expenses) for leveraged loan borrowers, reversing two years of weakness. The share of leveraged loans lacking lender-protecting covenants remained at an all-time high, representing more than 86 percent of newly issued institutional leveraged loans.

For corporate bonds, low interest rates and stable markets following the Federal Reserve interventions have allowed corporations to reduce borrowing costs and push out maturities, providing more financial

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59 Board of Governors of the Federal Reserve System, Financial Accounts of the United States; and Bureau of Economic Analysis GDP estimates.


63 S&P Global Market Intelligence, Leveraged Commentary and Data, Quarterly Leveraged Lending Review, Fourth Quarter 2020.
cushion. As of January 1, 2021, corporate debt maturing in 2021 declined relative to levels before the pandemic, with investment-grade maturities peaking in 2022 and high-yield maturities not peaking until 2025.64 However, firms in sectors most affected by the pandemic will likely continue to face difficulties into 2021 and could encounter further credit downgrades and bankruptcies, which have already increased substantially. Leveraged loan defaults rose substantially in 2020 but have declined since peaking in third quarter 2020 (Chart 43).

Banks remain exposed to corporate debt risks both directly and indirectly. Banks have exposure to corporate debt through several channels, including term and revolving syndicated lending facilities. Drawn syndicated loans from banks surged in the first quarter of 2020 as corporate borrowers drew on unfunded credit lines to shore up liquidity amid the uncertainty of the pandemic. While these drawn syndicated loans have since declined as borrowers repaid or refinanced them, banks still held almost $1 trillion in drawn syndicated loans as of fourth quarter 2020, more than triple the amount they held a decade earlier (Chart 44).65

Banks also face indirect exposure to leveraged loans through their holdings of CLOs. As of fourth quarter 2020, bank CLO holdings totaled at least $101 billion.66 Bank CLO holdings are likely less risky than the leveraged loans they hold directly, as banks tend to

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66 FDIC, Consolidated Reports of Condition and Income (Call Reports). Information is reported only for banks with at least $10 billion in assets and may include some assets other than CLO holdings. Due to the limited coverage of banks, it is likely an underestimate. The Call Report line items included in this measure are commercial and industrial loan asset-backed securities and structured financial products whose underlying collateral or reference assets are corporate and similar loans. These holdings include assets held to maturity, available for sale, and held in trading accounts.
predominantly hold higher-rated CLO tranches. Large banks also arrange most leveraged loan issuances and provide warehouse financing to new CLOs, which can put them at risk in times of disruption in leveraged loan markets as they could take losses on warehouse loans or be forced to retain underwritten leveraged loans on their balance sheets. The market turmoil in early 2020 resulted in new issuance of leveraged loans drying up and secondary market loan prices plunging. However, the relatively quick rebound in leveraged loan and high-yield bond issuance in the second half of 2020, amid Federal Reserve support for the higher-rated portions of corporate debt markets, likely limited the harm to arranging banks, as did the postponement of a large amount of planned leveraged loans. The risk remains that a more prolonged downturn in leveraged credit markets could result in losses to arranging banks and warehouse lenders.

Banks also earn fees from arranging bond, leveraged loan, and CLO issuances. A significant and prolonged decline in issuance would result in less fee income for U.S. banks. Finally, macroeconomic disruptions from corporate debt disruptions due to businesses reducing employment and investment could have negative spillover effects to asset quality in other types of bank loans.

Banks are better positioned to withstand shocks than they were before the Great Recession, which may help them manage potential strains in the corporate debt market. Bank capital levels are substantially higher than they were before the Great Recession, and their reliance on short-term wholesale funding has fallen as the use of deposit funding has risen. Banks with high concentrations of corporate debt exposure could face strains in the event of further corporate debt distress. In particular, banks with concentrations in loans to firms in especially hard-hit industries such as energy and hospitality could face elevated credit losses as those firms struggle to recover from the pandemic.

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Nonbank Financial Institution Lending

- Loans to nonbank financial institutions increased in 2020.
- Nonbank financial institutions relied on bank lending amid uncertainty at the onset of the pandemic.
- The growth in banking sector exposure to nonbank financial institutions in 2020 increased the industry’s vulnerability to risks from nonbank lending activities.

Banks were an important source of funding for nonbank financial institutions at the onset of the pandemic. Bank lending to nonbank financial institutions as a percentage of total loans has increased steadily since 2010, reaching $579 billion at year-end 2020 (Chart 45). The year-over-year growth rate for nonbank financial institution lending outpaced growth in most other loan portfolios in 2020, surging 38 percent in the first quarter (Chart 46). Like many other businesses, nonbank financial institutions drew down their existing lines at banks amid uncertainty at the onset of the pandemic, which contributed to strong loan growth. The pace of growth slowed during the rest of 2020 but continued to exceed the growth rate in most other loan categories.

Most of the lending to nonbank financial institutions occurs at the largest banks. Global systemically important banks held 58 percent of all loans outstanding to nonbank financial institutions as of fourth quarter 2020. Community banks accounted for 3 percent ($19 billion) of total loans to nonbank financial institutions. While community bank balances of nonbank financial institution lending dropped in the first half of 2020, balances rebounded in the second half of the year, exceeding pre-pandemic levels.

Community banks tend to lend to nonbank mortgage originators. Most lending to nonbank financial institutions by community banks is typically through warehouse lines of credit to nonbank mortgage lenders. While warehouse lines were a significant source of loss to banks during the Great Recession, mortgage origination and servicing is relatively low risk because of frequent monitoring and significant collateralization. The nonbank mortgage origination business increased substantially in the past year in tandem with significant mortgage refinancing activity and could explain the recent rebound in nonbank lending balances.

Banks that lend to nonbanks also are exposed to indirect risks. Some nonbanks are highly leveraged, and their portfolios are relatively unseasoned and untested. While recent government support reduced the risk of adverse events challenging the nonbank sector, funding risks could arise when government support is withdrawn. Some research indicates that some nonbanks hold riskier loans than banks. For example, these nonbanks are less likely to require or monitor for financial covenants on their loans, charge interest rates that may not reflect all of the risk, and lend to less profitable, more leveraged borrowers. Further, some nonbanks have exposure to historically risky loan categories, such as commercial real estate. This additional indirect exposure may pose risks to banks.

Loans to nonbank financial institutions held by FDIC-insured institutions totaled $579 billion in fourth quarter 2020.

- Global systemically important banks hold about 58 percent of all loans outstanding to nonbank financial institutions.
- Community banks hold 3 percent ($19 billion) of total loans to nonbank financial institutions.

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70 Nonbank financial institutions include mortgage lenders and other nonbanks that do not primarily make loans, including private equity funds, real estate investment trusts, hedge funds, insurance companies, and venture capital funds.

if not fully reflected in their portfolio concentration monitoring or other risk management tools.

Banks were an important source of funding for nonbank financial institutions in 2020. Because of the direct and indirect risks inherent in these loans, lending to nonbank financial institutions requires prudent monitoring and underwriting. As nonbank financial institution balances continue to grow, banks may be increasingly exposed to the direct and indirect risks posed by nonbank financial institutions.

**Chart 45**

Bank Lending to Nonbank Financial Institutions Surged at the Onset of the Pandemic

<table>
<thead>
<tr>
<th>Loans to Nonbank Financial Institutions</th>
<th>Share of Banks With Loans to Nonbanks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community Bank Loans to Nonbanks (Left Axis)</td>
<td>Percent Share of Banks With Loans to Nonbanks (Right Axis)</td>
</tr>
<tr>
<td>Noncommunity Bank Loans (Excluding GSIBs) to Nonbanks (Left Axis)</td>
<td></td>
</tr>
<tr>
<td>GSIB Loans to Nonbanks (Left Axis)</td>
<td></td>
</tr>
</tbody>
</table>

Source: FDIC.
Note: Quarterly data through fourth quarter 2020. GSIBs are global systemically important banks and are introduced in fourth quarter 2011.

**Chart 46**

Growth in Lending to Nonbank Financial Institutions in 2020 Outpaced Growth in Most Major Loan Categories

<table>
<thead>
<tr>
<th>Annual Loan Growth Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
</tr>
<tr>
<td>Consumer</td>
</tr>
<tr>
<td>Commercial Real Estate</td>
</tr>
<tr>
<td>1–4 Family</td>
</tr>
<tr>
<td>Commercial and Industrial</td>
</tr>
<tr>
<td>Loans to Nonbank Financial Institutions</td>
</tr>
</tbody>
</table>

Source: FDIC.
Small Business Lending

- Small business conditions weakened significantly at the onset of the pandemic as stay-at-home orders and changing consumer behavior reduced business activity.
- Small business lending increased in 2020, primarily because of government programs such as the PPP.
- Small business closures and bankruptcies did not translate into credit deterioration in 2020.
- While asset quality remained at manageable levels at year-end 2020, the long-term effect of the pandemic on small business asset quality is uncertain and remains an important source of credit risk for banks.

Small business lending is a key component of many bank lending portfolios, regardless of location.

- Banks with total small business loans greater than 75 percent of total C&I loans comprise approximately 44 percent of total FDIC-insured institutions.

Regional Exposure to Small Business Lending

Dots on map represent banks where small business loans are greater than 75 percent of C&I loans.

Source: FDIC.
Note: U.S. territories are not included in the map; one bank in Guam with a concentration of small business loans is not shown.
The deterioration in small business conditions during the pandemic differed from previous recessions. Stay-at-home orders, mandated temporary business closures, and reduced consumer spending on nonessential goods and services during the pandemic caused many small businesses to shutter or change their business strategy. Consumers reduced their spending, which also reduced small business activity. In contrast, most small businesses in previous recessions continued to operate despite slower sales, and businesses that closed had weaker business models or more exposure to the industries hit hardest by the recession. In short, the pandemic weakened large swaths of businesses more broadly and abruptly. Distress from the pandemic-induced closures has persisted even as broader economic growth has improved.

Banks played a key role in funding small businesses throughout 2020, often in conjunction with federal programs such as the PPP. Outside of the PPP, demand for business loans fell and underwriting standards tightened. While asset quality remained at manageable levels at year-end 2020, the long-term effect of the pandemic on small business asset quality is uncertain.

Stay-at-home orders had various effects on small businesses. Stay-at-home orders were instituted in many cities, counties, and states at the onset of the pandemic (Map 2). These orders caused many small businesses to limit capacity, shift business models, lay off employees, or close. Many initial orders were lifted throughout the spring and summer of 2020, allowing businesses to reopen and rehire employees. New businesses opened, including restaurants that offered more outside seating and order-ahead menus, as well as food trucks and food vendors at farmers’ markets. These openings increased in mid- to late-2020 and were on track with monthly openings in 2019. While a resurgence of COVID-19 occurred in late 2020, most states did not reinstate strict stay-at-home orders (Map 3).

The decline in consumer spending shows the effect of stay-at-home orders on individuals and businesses. Personal consumption expenditures (PCE) declined sharply when the pandemic began. Second quarter

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73 Bureau of Economic Analysis, Table 2.3.5U: Personal Consumption Expenditures by Major Type of Product and by Major Function, Fourth Quarter 2020, https://apps.bea.gov/iTable/iTable.cfm?reqid=19&step=3&isuri=1&select_all_years=0&nipa_table_list=2014&series=m&first_year=2020&last_year=2021&scale=99&category=underlying&ihetable.
2020 PCE dropped almost 10 percent from a year earlier and more than 11 percent from the fourth quarter 2019 high. While PCE rebounded in fourth quarter 2020, it remained below the level of a year earlier (Chart 47). PCE categories that saw the biggest year-over-year declines in fourth quarter 2020 were recreation, transportation, and food services and accommodations. While these categories improved quarter over quarter, levels remain well below those of a year earlier. Conversely, several PCE categories reported a year-over-year increase, reflecting the effect of stay-at-home orders on consumer behavior. Motor vehicles and parts, furnishings and durable household goods, and recreational goods saw double-digit growth between fourth quarter 2019 and fourth quarter 2020. These changes in consumer spending all translate to the health and viability of small businesses.

Business closures and bankruptcies vary by business type and size. Business closures have risen dramatically since the start of the pandemic. As of August 31, 2020, more than 163,000 businesses listed on Yelp closed and approximately 98,000 closed permanently, a rate of 1.96 percent based on the 4.9 million active business listings on Yelp. According to data from Womply, open businesses declined approximately 29 percent between January 2020 and December 2020.

The effect of the pandemic on small businesses also varied by business type. Hospitality, retail, and food services were hurt more than other small businesses such as law offices and real estate agencies. Restaurants closed at a rate of 55 businesses per 1,000, and almost 20,000 closed permanently. Restaurants and retail are expected to continue to be among the hardest hit businesses in 2021 with outlooks that show a slow recovery but a return to pre-pandemic levels.

Despite the adverse effects of stay-at-home orders, declining consumer spending, and permanent business closings in 2020, the number of commercial bankruptcy filings was slightly below prior-year levels. Total Chapter 7 and Chapter 11 bankruptcy filings in 2020 declined 7.1 percent from 2019 and 10.2 percent since the onset of the pandemic (Table 1). A divergence occurs when comparing Chapter 11 bankruptcy filings, reorganizations, to Chapter 7 bankruptcy filings, liquidations. While reorganization bankruptcies increased 33.1 percent since the pandemic, liquidation filings declined 20.1 percent. Small businesses, which

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**Chart 47**

**Consumer Spending Shifted From Services to Durable Goods During Stay-at-Home Orders**

Durable Goods vs. Services Expenditures, 2018–2020

$ Billions

<table>
<thead>
<tr>
<th></th>
<th>2Q2018</th>
<th>4Q2018</th>
<th>2Q2019</th>
<th>4Q2019</th>
<th>2Q2020</th>
<th>4Q2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motor Vehicles and Parts</td>
<td>1,100</td>
<td>900</td>
<td>700</td>
<td>500</td>
<td>300</td>
<td>200</td>
</tr>
<tr>
<td>Furnishings and Durable Household Equipment</td>
<td>1,000</td>
<td>800</td>
<td>600</td>
<td>400</td>
<td>300</td>
<td>200</td>
</tr>
<tr>
<td>Recreational Goods and Vehicles</td>
<td>900</td>
<td>700</td>
<td>500</td>
<td>400</td>
<td>300</td>
<td>200</td>
</tr>
<tr>
<td>Transportation Services</td>
<td>800</td>
<td>600</td>
<td>400</td>
<td>300</td>
<td>200</td>
<td>100</td>
</tr>
<tr>
<td>Recreation Services</td>
<td>700</td>
<td>500</td>
<td>400</td>
<td>300</td>
<td>200</td>
<td>100</td>
</tr>
<tr>
<td>Food Services and Accommodations</td>
<td>600</td>
<td>400</td>
<td>300</td>
<td>200</td>
<td>100</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: Bureau of Economic Analysis.

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75 Womply is a data platform that provides business solutions such as marketing, website development, and customer management to small businesses. As of March 17, 2021, Womply reported that more than 500,000 small businesses in 14 main industry categories use their various technology and data solutions.


tend to file Chapter 7 rather than Chapter 11, have benefited from various federal programs, while large corporations continue to use the bankruptcy system.\textsuperscript{78}

The counterintuitive trend of an overall decline in small business bankruptcy filings during the pandemic reflects federal aid to businesses through the PPP and other SBA lending programs, access to credit through various Federal Reserve lending facilities, and other measures to ease the financial strain on businesses and consumers. While bankruptcy and closing activities may have been limited by federal programs, the expiration of those programs may spur additional bankruptcy filings and small business closures in 2021.

**Small business lending increased in 2020, largely because of programs established by the CARES Act.** The PPP was established in March 2020 under the CARES Act to provide small businesses with funds to keep employees on the payroll despite disruptions in business. Banks were the primary lenders, providing more than $492 billion in PPP loans to small businesses. Community banks provided $151 billion, or more than 31 percent of bank-funded PPP loans.\textsuperscript{79} Excluding these loans, industry C&I loan balances declined 7.9 percent year over year and total loans declined 0.6 percent (Chart 48). The decline in non-PPP C&I loans reflects tightening lending standards and lack of demand by businesses in an uncertain economy.\textsuperscript{80}

Respondents to the Federal Reserve’s January 2021 Senior Loan Officer Opinion Survey indicated that underwriting standards for C&I lending tightened except for firms with annual sales of $50 million or more. Reasons for the tightening include an uncertain economic forecast, worsening of problems in some industries (such as in hotel, restaurant, and retail industries), increased concerns about the effects of legislative actions, and decreased liquidity in the secondary market for these loans. Respondents

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\textsuperscript{80} Board of Governors of the Federal Reserve System, Senior Lending Officer Opinion Survey on Bank Lending Practices, February 1, 2021, \url{https://www.federalreserve.gov/data/sloos/sloos-202101.htm}. 

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### Table 1

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter 7 Filings</td>
<td>22,834</td>
<td>19,220</td>
<td>(15.8)</td>
<td>19,492</td>
<td>15,565</td>
<td>(20.1)</td>
</tr>
<tr>
<td>Chapter 11 Filings</td>
<td>5,519</td>
<td>7,128</td>
<td>29.2</td>
<td>4,468</td>
<td>5,949</td>
<td>33.1</td>
</tr>
<tr>
<td>Total Filings</td>
<td>28,353</td>
<td>26,348</td>
<td>(7.1)</td>
<td>23,960</td>
<td>21,514</td>
<td>(10.2)</td>
</tr>
</tbody>
</table>

Source: American Bankruptcy Institute.

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### Chart 48

**Paycheck Protection Program Loans Drove Loan Growth in 2020**

Annual Loan Growth Rates, 2019–2020

- Including PPP Loans
- Excluding PPP Loans

Respondents to the Federal Reserve’s January 2021 Senior Loan Officer Opinion Survey indicated that underwriting standards for C&I lending tightened except for firms with annual sales of $50 million or more. Reasons for the tightening include an uncertain economic forecast, worsening of problems in some industries (such as in hotel, restaurant, and retail industries), increased concerns about the effects of legislative actions, and decreased liquidity in the secondary market for these loans. Respondents
indicated that they saw weaker demand for C&I loans, including a decline in customer loan inquiries. The decline appears to reflect lack of demand for inventory financing, asset-based financing, equipment purchase financing, and merger and acquisition financing. Respondents also indicated that deterioration in loan performance is anticipated, except for firms with annual sales of $50 million or more.

Despite business closures and changes in consumer spending and saving, banks did not report a substantial increase in nonperforming loans in fourth quarter 2020. The banking industry reported modest credit deterioration, as the noncurrent rate rose only 27 basis points to 1.18 percent between fourth quarter 2019 and fourth quarter 2020. The C&I noncurrent loan rate rose 20 basis points to 0.99 percent. These rates may be muted, however, because of strong C&I loan growth from PPP loan originations. When excluding PPP loans, the C&I noncurrent rate increases another 20 basis points to 1.19 percent (Chart 49). The C&I noncurrent rate at community banks declined 23 basis points to 0.66 percent from fourth quarter 2019. Again, this rate is affected by PPP loan originations. Excluding PPP loans, the community bank noncurrent C&I loan rate rises 37 basis points to 1.03 percent.

The outlook for small business lending in 2021 is unclear. The second round of PPP approved by Congress in late December 2020 provides an additional $284 billion for small businesses. This new round of funding changes requirements for firms requesting a second PPP loan, such as reducing the number of employees needed to qualify as a small business, requiring businesses to show a 25 percent decline in business receipts between comparable quarters in 2019 and 2020, increasing the range of purposes for the loan proceeds, and easing forgiveness applications for loans less than $150,000.

While these changes are designed to provide more funding to small businesses, demand for small business loans may remain low. The National Federation of Independent Businesses’ (NFIB) December 2020 survey showed that 60 percent of respondents “were not interested in a loan.” Moreover, while the Federal Reserve Board’s January 2021 Beige Book indicates that bankers anticipate an increase in loan demand owing to PPP and other government-backed lending programs, the resurgence of the virus, including new strains, has tempered that optimism. Some districts indicated a drop

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**Chart 49**

**Paycheck Protection Program Loans Are Muting Noncurrent Loan Rates**

<table>
<thead>
<tr>
<th>Noncurrent Rates, Q4 2020</th>
<th>Industry</th>
<th>Community Banks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noncurrent Loan Rate</td>
<td>1.2</td>
<td>0.9</td>
</tr>
<tr>
<td>Noncurrent Loan Rate Excluding PPP Loans</td>
<td>1.0</td>
<td>0.7</td>
</tr>
<tr>
<td>Noncurrent C&amp;I Loan Rate</td>
<td>0.9</td>
<td>0.6</td>
</tr>
<tr>
<td>Noncurrent C&amp;I Rate Excluding PPP Loans</td>
<td>0.7</td>
<td>0.4</td>
</tr>
</tbody>
</table>

Source: FDIC.
Note: C&I is commercial and industrial.

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81 PPP loans are guaranteed fully by the SBA and pose no risk to insured depository institutions as demonstrated with the zero percent weight given for risk-based capital calculations.
in loan demand and a tightening of C&I underwriting
standards. Some districts also are concerned that a rise
in delinquencies will result from forbearance roll-offs,
although this increase has not been seen in the past. The
recovery for small businesses remains uneven but is
on par with previous recessions. According to the NFIB
survey, some businesses are hiring or making capital
expenditures, but few are seeing an increase in sales.
Business owners do not expect business conditions to
improve in the next six months. In addition, the NFIB
Optimism Index fell to 95.9 in December, down 5.5
points from November but up slightly from the April
2020 low of 90.9. While the index has not returned to
its pre-pandemic level of 104 reported in February
2020, recovery is on par with previous downturns. The
NFIB Optimism Index took 20 months to rebound to its
November 2007 level after the Great Recession. Areas of
concern related to small business lending could
be exacerbated if economic conditions do not improve
as quickly or as much as expected in 2021. Although
distribution of the COVID-19 vaccines has begun, small
businesses may wait to see how the recovery progresses
and whether consumers return to pre-pandemic
spending patterns before they rehire employees or
borrow funds.

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84 NFIB’s Optimism Index measures the “mood” of small businesses that respond to its monthly survey that covers ten components: employment, capital outlays, inventory increases, economic improvement, higher sales, current inventory levels, current job openings, expected credit conditions, expansion, and earnings trends. A value greater than 100 indicates that business owners are optimistic about the future; a value less than 100 indicates that business owners are pessimistic about the future.

85 NFIB Optimism Index data using Great Recession dates of December 2007 through June 2009.
MARKET RISK

Interest Rate Risk and Net Interest Margin

- The low interest rate environment challenged banking sector profitability in 2020 as net interest margins (NIMs) narrowed to a record low.
- The large increase in deposits coupled with decreased loan demand in 2020 pose interest rate risk challenges for banks.
- Community bank net interest income as a percentage of net operating revenue weakened last year during a period of low interest rates and tepid loan demand.

Aggregate NIMs for both community and noncommunity banks narrowed significantly in 2020.

- The NIM for community banks compressed to 3.39 percent, a decline of 27 basis points from 2019 and a historical low.
- The NIM for noncommunity banks narrowed to 2.75 percent, a decline of 57 basis points from 2019 and a historical low.
- Banks reporting NIM compression higher than that of 80 percent of the banking industry were primarily smaller community banks, with an average NIM compression of 37 basis points.

Banks With NIM Compression Above the 80th Percentile

Dots on map show the distribution of banks with average year-over-year NIM compression of 37 basis points, which ranked in the 80th percentile or higher.

Source: FDIC.
The low interest rate environment challenged the banking sector in 2020 as net interest margins narrowed to record lows. Both short-term and longer-term interest rates declined considerably in 2020. The effective federal funds rate fell by more than 150 basis points during the first two quarters of 2020, while broader market interest rates experienced similar declines to historic lows (Chart 50). Specifically, the 5-year Constant Maturity Treasury (CMT) yield dropped from 1.67 percent at the beginning of 2020 to 0.36 percent as of year-end 2020. The 10-year CMT yield dropped from 1.88 percent to 0.93 percent during the same period.

Lower interest rates in 2020 contributed to a decline in the industry NIM to a record low for the year. The reduction in NIM was broad-based, affecting banks of all asset sizes (Chart 51). The vast majority of banks that reported the highest levels of NIM compression—ranking in the 80th percentile for all institutions—were smaller banks, those with less than $1 billion in total assets. The extent to which the banking industry can reduce funding costs further to help protect against additional NIM compression remains uncertain. During the second half of 2020, longer-term interest rates improved and the yield curve steepened slightly, which typically have supported improvement in net interest margins.

Although lower interest rates resulted in severe NIM compression, some banks benefited from increased mortgage loan refinancing activity spurred by the drop in mortgage rates. Higher mortgage refinancing activity boosted noninterest income from mortgage banking activities, offsetting a reduction in mortgage servicing fees that was likely due to higher impairment in mortgage servicing assets. Lower levels of medium- and long-term interest rates last year also contributed to the sale of higher-yielding 1–4 family mortgages at a premium by banks. As a result of these gains on sale, noninterest income to net operating revenue (net interest income plus noninterest income) increased 2.1 percent in 2020 for the industry.

A slowdown in lending and new loans priced at lower interest rates further pressured income, but higher fee income helped mitigate the decline. Low-yielding PPP loans led total loan growth in 2020. Banks held $407.4 billion in PPP loans at year-end 2020, of which community banks held $114.7 billion or 28 percent. Although PPP loans carry a low interest rate of 1 percent, lenders also receive an origination fee of up to 5 percent based upon the loan amount. Total interest and fee income from PPP loans provided support to net interest income for the banking industry last year as demand for other loan types was anemic.

Fee income from PPP loans bolstered earnings for many banks late last year. Banks with a large proportion of PPP loans to total loans (10 percent or greater) reported a notable increase in interest income. During fourth

![](Image)

**Chart 50**

**Interest Rates Across the Maturity Spectrum Fell Sharply in First Quarter 2020**

![Graph showing interest rates across the maturity spectrum from Q1 2020 to Q4 2020.](Image)

Source: Federal Reserve.

Note: Spread refers to the difference between the 10-year Constant Maturity Treasury (CMT) yield and the 2-year CMT.
quarter 2020, PPP loan balances declined $83 billion (17.1 percent) as some PPP loans were forgiven. The fee income that was generated more than offset the loss of the low-yielding repaid PPP loans.

The large increase in deposits coupled with decreased loan demand pose interest rate risk challenges for banks. The pandemic-induced savings behavior among businesses and consumers, a drawdown of available credit facilities by corporate borrowers during a period of financial market uncertainty, and government assistance programs all contributed to a large influx of bank deposits primarily in the first half of 2020. Slightly more than half of the deposit growth in 2020 (55 percent) was in interest-bearing accounts, such as money market demand accounts and time deposits. These liabilities, which increased $1.8 trillion (16.1 percent) from 2019, may become more costly and subject to withdrawal at maturity if interest rates rise and depositors have more options to pursue higher-yielding investment opportunities.

Nonmaturity deposits rose 16.7 percent in 2020 from 2019 levels. Because depositors can withdraw these funds at will, bank expectations related to the stability of these deposits will be crucial to effective interest rate risk management. If withdrawn, bank management may have to turn to more costly funding sources, which would place additional pressure on net interest income.

Deposit growth greatly exceeded loan demand in 2020. The ratio of loans to assets declined across community and noncommunity banks last year. The net loans and leases to assets ratio for community banks fell 4.5 percentage points year over year to 66.3 percent. The same ratio for noncommunity banks fell more than twice the community bank rate (10.6 percentage points) to 43.2 percent during the same period and was a record low (Chart 52).

Reduced loan demand and a lack of higher-yielding investment options contributed to a shift in the maturity structure of the industry’s securities portfolio in 2020. The ratio of securities with contractual maturities of three years or greater reached its highest level in nearly 20 years at 17.1 percent of total assets last year, up nearly 2 percentage points from 2019. This maturity extension likely reflected the desire by banks to gain some extra yield on investments during a period of reduced loan demand. Conversely, the ratio of medium- to long-term loans (those with maturities of three years or greater) declined from 20.7 percent to 18.4 percent year over year.

Community bank net interest income as a percentage of net operating revenue weakened last year during a period of low interest rates and tepid loan demand. During 2020, net interest income as a percentage of net operating revenue for community banks declined from 79.6 percent to 75.6 percent, a 30-year low. This decline was driven primarily by an increase in relatively low-yielding earning assets—PPP loans and securities. This trend reflects differences between traditional business models of community and noncommunity
banks. A larger proportion of loans to assets and a greater volume of higher-yielding commercial real estate loans to total loans support community bank NIMs during periods of low interest rates but may limit community bank options to maintain profitability during a prolonged period of low interest rates and tepid loan demand.

In addition, community banks have a less sensitive funding cost structure—one that reacts more slowly to sharp reductions in market rates—which limits their ability to reduce average funding costs as quickly as their noncommunity bank counterparts in a declining rate environment (Chart 53). A greater proportion of time deposits held by community banks contributes to this disparity. Time deposits represented 17.5 percent of community bank assets as of fourth quarter 2020 compared with 5.6 percent for noncommunity banks.

Because time deposits have fixed terms and generally bear fixed interest rates, they do not reprice as quickly as nonmaturity deposits. This benefits community banks in a period of rising interest rates but has the opposite effect when market rates decline, as occurred last year. Community banks responded to the low interest rate environment by reducing funding costs. A decline in the use of typically more costly wholesale funding in favor of lower-cost core deposits supported reduced funding costs by community banks overall last year. However, funding costs approached historical lows, thus limiting the potential for community banks to drop deposit costs further. With expectations for continued low interest rates for the near term, the banking industry, and community banks in particular, may continue to face a challenging interest rate environment.86

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**Chart 53**

**Community Bank Funding Costs Are Less Sensitive to Interest Rate Changes Than Those of Noncommunity Banks**

<table>
<thead>
<tr>
<th>Year</th>
<th>Average Cost of Funding Earning Assets (Percent)</th>
<th>Fed Funds Rate (Percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>2009</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
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<td>1</td>
<td>9</td>
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<tr>
<td>2015</td>
<td>1</td>
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<tr>
<td>2016</td>
<td>1</td>
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<tr>
<td>2017</td>
<td>1</td>
<td>12</td>
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<tr>
<td>2018</td>
<td>1</td>
<td>13</td>
</tr>
<tr>
<td>2019</td>
<td>1</td>
<td>14</td>
</tr>
<tr>
<td>2020</td>
<td>1</td>
<td>15</td>
</tr>
</tbody>
</table>

Sources: FDIC and Federal Reserve.
Note: Data from December 2008 through December 2020.

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Liquidity and Deposits

- **Deposits surged during the pandemic as consumers and businesses responded to uncertainty by stockpiling cash. This caused a significant increase in banking sector liquidity.**
- **Federal programs created to mitigate economic stress, particularly the CARES Act, also contributed to deposit growth.**
- **Community bank reliance on wholesale funding decreased as on-balance sheet liquidity improved.**
- **Weak loan growth in 2020 contributed to improved liquidity among community banks.**

Liquidity represents a financial institution’s ability to fund assets and meet obligations as they become due. Maintaining adequate liquidity is an essential part of banking. Liquidity is required to fulfill depositor withdrawals, make advances on existing lines of credit, and fund new loans. Financial institutions meet these demands by maintaining sufficient levels of cash, liquid assets, and prospective borrowing lines based on anticipated liquidity demands.

Liquidity improved across the industry in 2020, and community banks reported higher liquidity levels than noncommunity banks.

- Community banks’ median short-term liquid assets to total assets ratio was 15 percent as of year-end 2020 compared to 11 percent at noncommunity banks with assets under $100 billion.
- Year over year, 961 community banks more than doubled their short-term liquid asset ratios in 2020. Among these institutions, more than one-third reported year-end ratios of 20 percent or more.
- Deposits are the primary source of funding for most community banks.

Community Banks More Than Doubled Short-Term Liquid Assets

Dots indicate community banks that reported short-term liquid asset ratios two or more times higher than the prior year as of December 31, 2020.

Source: FDIC.
Note: U.S. territories are not included in the map; one bank in Guam that meets the definition of increased short-term liquid assets is not shown.

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Wholesale funding includes federal funds purchased and securities sold under agreement to repurchase; Federal Home Loan Bank borrowings; brokered and listing service, municipal and state, and foreign deposits; and other borrowings. Providers of wholesale funding closely track institutions’ financial condition and may cease or change access to wholesale funds if they determine a financial institution’s condition is deteriorating.
Deposits surged during the pandemic as consumers and businesses responded to uncertainty by stockpiling cash. Coinciding with the economic uncertainty caused by the pandemic, many banks experienced an unprecedented influx of deposits. In aggregate, bank deposits grew by $3.3 trillion, or 22.6 percent, in 2020. Although the largest banks (those with total assets exceeding $100 billion) captured the majority of deposit growth, deposits held at community banks also grew substantially, rising nearly 16 percent from $1.8 trillion to more than $2.1 trillion in 2020 (Chart 54). Deposit growth was significant in 2020 compared to the last five years. Between 2014 and 2019, the annual growth rate for community bank deposits reported annual deposit growth between negative 1 percent and 3.3 percent.

Numerous factors contributed to the increase in community bank deposits. For example, when a national state of emergency was first announced in March 2020, there was an observable flight to cash and security by consumers and businesses. Many consumers decreased spending and increased savings as a result of canceled vacations, dining out less because of social distancing restrictions, and reduced transportation expenses associated with working and learning from home. In addition, some large corporations drew on existing lines of credit and stockpiled cash in deposit accounts as a contingency measure.

Federal programs created to mitigate economic stress, particularly the CARES Act, also contributed to deposit growth. Government assistance provided individuals with stimulus checks and increased unemployment benefits. It also provided thousands of small businesses access to billions of dollars in potentially forgivable PPP loans. A large share of those newly acquired funds were deposited into the banking system by consumers and small businesses.

The Federal Reserve also played a role in the increase through its emergency lending programs and monetary policy. The Federal Reserve responded to the pandemic by offering or expanding certain borrowing programs. In addition to advertising discount window promotions, the Federal Reserve made available new borrowing programs that included the Payment Protection Program Liquidity Facility (PPPLF) to aid banks in maintaining adequate liquidity. In addition, throughout 2020 the Federal Reserve remained committed to an asset purchase program under which it purchases Treasury and mortgage-backed securities from the private market. This program injects cash and liquidity into the economy, which increases bank deposit accounts.

Community bank reliance on wholesale funding decreased as on-balance sheet liquidity improved. Community banks’ overall wholesale funding activity has steadily declined since 2017. The ratio of wholesale funding to total assets at community banks dropped from 19 percent in 2017 to 15 percent in 2020. In comparison, noncommunity banks with less than $100 billion in assets reported a wholesale funding to total assets ratio of 18 percent in 2020 compared to 23 percent in 2017. Community banks generally rely less on wholesale funding compared to noncommunity banks, although both groups show a similar reduction in wholesale funding reliance since 2017.

Wholesale funds can include federal funds purchased and securities sold under agreement to repurchase; borrowings from the Federal Home Loan Bank (FHLB); brokered and listing service, municipal and state, and foreign deposits; and other borrowings. Among those wholesale funding components, the most notable changes over the past three years were in borrowed funds and, to a lesser extent, brokered and listing service deposits. FHLB balances steadily declined from almost $112 billion in fourth quarter 2017 to $73 billion in 2020. Community banks also have relied less on brokered and listing service deposits, as reported aggregate balances
decreased by more than $2 billion in the past year, although some of this decline may be due to a reporting change rather than a reduction in funding source.\(^8\) These declines since 2017 offset an increase in other borrowings (Chart 55).

Conversely, other borrowings by community banks increased in 2020 primarily because of government programs introduced in the first half of the year. Roughly 85 percent of the other borrowings reported in fourth quarter 2020 includes credit extended through the PPPLF. Not every financial institution that originated PPP loans took advantage of the PPPLF, but those that did were extended credit at marginal cost and at full face value of the PPP loans that served as collateral. The PPPLF was an attractive source of funding for banks that participated.

**Weak loan growth in 2020 contributed to improved liquidity among community banks.** Traditionally, banks use excess liquidity to fund new loans. Absent PPP loan activity, loan growth at community banks was modest last year, consistent with the weak economy and uncertain outlook. Although many banks observed an increase in deposits, far fewer were able to successfully deploy that extra liquidity into new loans. Loan volume as a percent of total assets dropped from 71 percent in 2019 to 67 percent in 2020 at community banks.

Uncertainty in the economy, coupled with a sudden rise in deposits, led many community banks to allocate a higher percentage of assets to readily available liquidity sources, such as cash and due from accounts, securities maturing in less than a year, and federal funds sold, some of which increased significantly in 2020. Among community banks, the median short-term liquid assets to total assets ratio increased year over year from 11 percent in fourth quarter 2019 to 15 percent in fourth quarter 2020 (Chart 56).\(^9\)

**Sudden changes to depositor behavior could challenge community bank liquidity.** While many community banks ended 2020 flush with liquidity, the permanence of new consumer and business deposits is unknown. The reduction in bank borrowings and other wholesale funding components correlates with increased deposits and enhanced on-balance sheet liquidity. However, the long-term liquidity position for community banks remains uncertain. Liquidity levels will depend on how long consumers and businesses hold funds in risk-free deposit accounts. Deposits that exit banks more quickly than anticipated could create higher liquidity risk for banks that are not adequately prepared.

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\(^8\) In 2018, a change in the treatment of reciprocal brokered deposits was made to the Call Report instructions that affected what is reported as brokered deposits. See Call Report instructions, Schedule RC-E, memoranda item 1.b., for more information.

\(^9\) 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.
# Acronyms and Abbreviations

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
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<tbody>
<tr>
<td>ADC</td>
<td>Acquisition, Development, and Construction</td>
</tr>
<tr>
<td>C&amp;D</td>
<td>Construction and Development</td>
</tr>
<tr>
<td>C&amp;I</td>
<td>Commercial and Industrial</td>
</tr>
<tr>
<td>Call Report</td>
<td>Consolidated Reports of Condition and Income</td>
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<tr>
<td>CLO</td>
<td>Collateralized Loan Obligation</td>
</tr>
<tr>
<td>CRE</td>
<td>Commercial Real Estate</td>
</tr>
<tr>
<td>E&amp;P</td>
<td>Exploration and Production</td>
</tr>
<tr>
<td>FDIC</td>
<td>Federal Deposit Insurance Corporation</td>
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<tr>
<td>FHLB</td>
<td>Federal Home Loan Bank</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>KBW</td>
<td>Keefe, Bruyette, and Woods (Bank Index)</td>
</tr>
<tr>
<td>LCD</td>
<td>Leveraged Commentary and Data (S&amp;P)</td>
</tr>
<tr>
<td>NASDAQ</td>
<td>National Association of Securities Dealers Automated Quotations (Market Index)</td>
</tr>
<tr>
<td>NIM</td>
<td>Net Interest Margin</td>
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<tr>
<td>PDNA</td>
<td>Past-Due and Nonaccrual</td>
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<tr>
<td>PPP</td>
<td>Paycheck Protection Program</td>
</tr>
<tr>
<td>S&amp;P</td>
<td>Standard and Poor’s</td>
</tr>
<tr>
<td>SNC</td>
<td>Shared National Credit</td>
</tr>
<tr>
<td>USDA</td>
<td>U.S. Department of Agriculture</td>
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<tr>
<td>VIX</td>
<td>CBOE Volatility Index</td>
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</tbody>
</table>
# Glossary of Terms

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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</thead>
<tbody>
<tr>
<td><strong>Bond</strong></td>
<td>A certificate of indebtedness issued by a government or corporation.</td>
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<tr>
<td><strong>Call Report</strong></td>
<td>A report of a bank’s financial condition that is filed quarterly with the FDIC and known officially as the Report of Condition and Income.</td>
</tr>
<tr>
<td><strong>Capital</strong></td>
<td>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.</td>
</tr>
<tr>
<td><strong>CARES Act</strong></td>
<td>The Coronavirus Aid, Relief, and Economic Security (CARES) Act, signed into law on March 27, 2020, which provided $2.2 trillion in economic relief in response to the COVID-19 pandemic.</td>
</tr>
<tr>
<td><strong>Collateral</strong></td>
<td>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.</td>
</tr>
<tr>
<td><strong>Collateralized Loan Obligations (CLOs)</strong></td>
<td>Securitization vehicles backed predominantly by commercial loans.</td>
</tr>
<tr>
<td><strong>Composite Rating</strong></td>
<td>A rating assigned by federal regulators to each financial institution, based on an evaluation of financial and operational criteria. The rating is based on a scale of 1 to 5 in ascending order of supervisory concern.</td>
</tr>
</tbody>
</table>
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).

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 equal to or exceeding 25 percent of total loans and leases.

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 Committee deliberations and discussion.

Forbearance  
A provision of the CARES Act required mortgage servicers or lenders to provide a forbearance plan, which suspended mortgage payments, to any homeowner with a federally backed mortgage who requested such a plan.

Great Recession  
The protracted economic contraction from December 2007 through June 2009. The collapse of the U.S. housing market in 2007 became the most severe financial crisis since the Great Depression, and the financial crisis, in turn, resulted in the Great Recession, whose effects spread throughout the global economy.

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.
**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.

**Loan Classifications**

Expressions of different degrees of the risk of nonpayment. Adversely classified loans are allocated based on the risk to three categories: Substandard, Doubtful, and Loss. Other loans of questionable quality, but involving insufficient risk to warrant classification, are designated as Special Mention loans.

**Long-Term Assets**

Loans and debt securities with remaining maturities or repricing intervals of more than five years.

**Negative Equity**

A situation in which a borrower’s mortgage principal is greater than the value of the house.

**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.

**OPEC+**
An alliance formed in December 2016 of top oil-producing countries including members of the Organization of the Petroleum Exporting Countries (OPEC) and 10 non-OPEC partner countries, collectively known as OPEC+.

**Past Due Loans and Leases**
Loans and leases 30 to 89, or 90 days or more past due, and still accruing interest.

**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 “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.

**Rebooked Loans**
Bank repurchases of delinquent single-family mortgage loans backing mortgage-backed securities that are recorded on the mortgage banking schedule in bank Call Reports.

**Recession**
A period of declining real income and rising unemployment; significant decline in general economic activity over a period of time.

**Revolving Credit**
A line of available credit 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.
Treasury Securities
Bonds, notes, and other debt instruments sold by the U.S. Treasury to finance U.S. government operations.

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 CLO 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; borrowings from the Federal Home Loan Bank (FHLB); brokered and listing service, municipal and state, and foreign deposits; and other borrowings (such as from the Federal Reserve’s Payment Protection Program Liquidity Facility). Providers of wholesale funding closely track institutions’ financial condition and may cease or curtail funding, increase interest rates, or increase collateral requirements if they determine an institution’s financial condition is deteriorating.

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. The shape of the yield curve often is viewed as an indicator of future economic activity.