

# Section III: Key Risks to Banks

## CREDIT RISK

### Agriculture

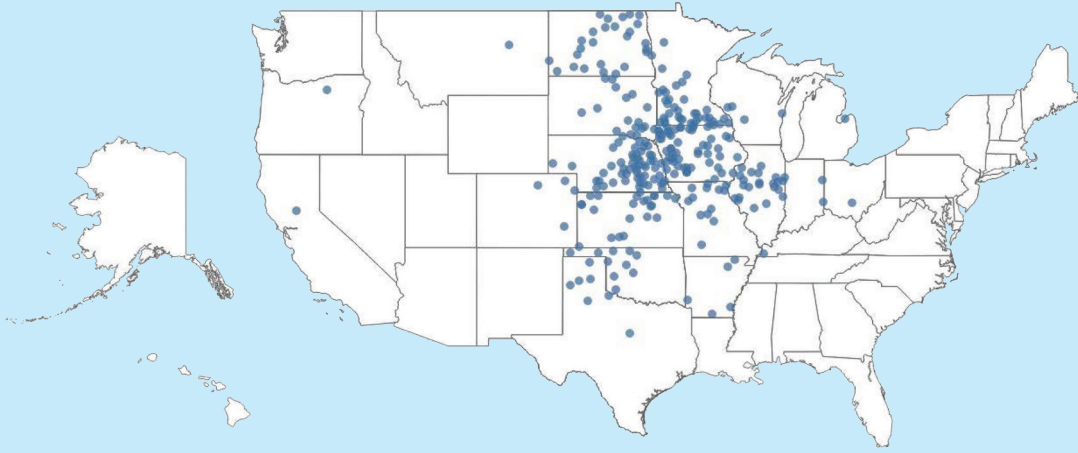
- *Agricultural producers weathered the volatile 2020 marketplace with the help of record levels of government assistance and a rebound in commodity prices.*
- *Despite improving agricultural market fundamentals, net farm income is expected to decrease in 2021 from last year because of lower direct government 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

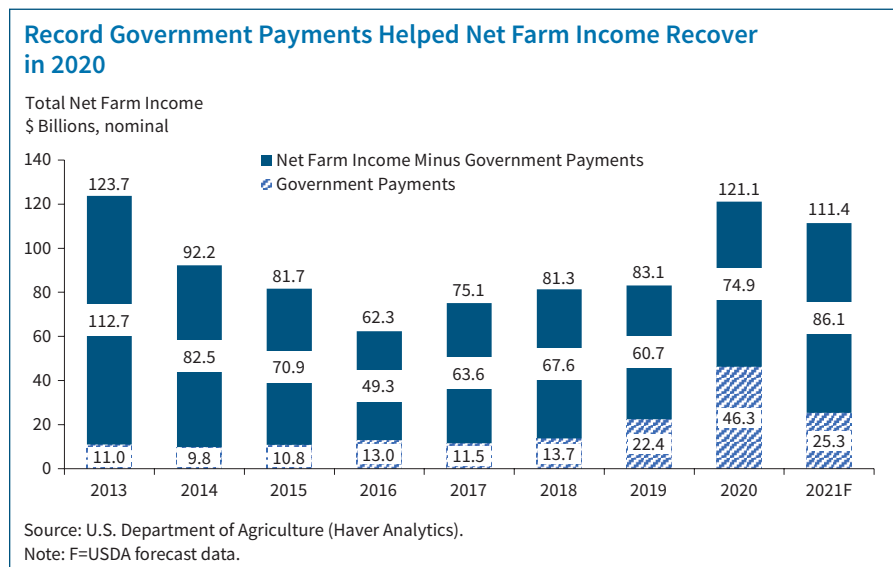
U.S. Department of Agriculture (USDA), net farm income, a broad measure of profitability, reached \$121.1 billion in 2020, an increase of 46 percent from the 2019 level (Chart 18).

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**



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.<sup>12</sup>

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

Chart 19

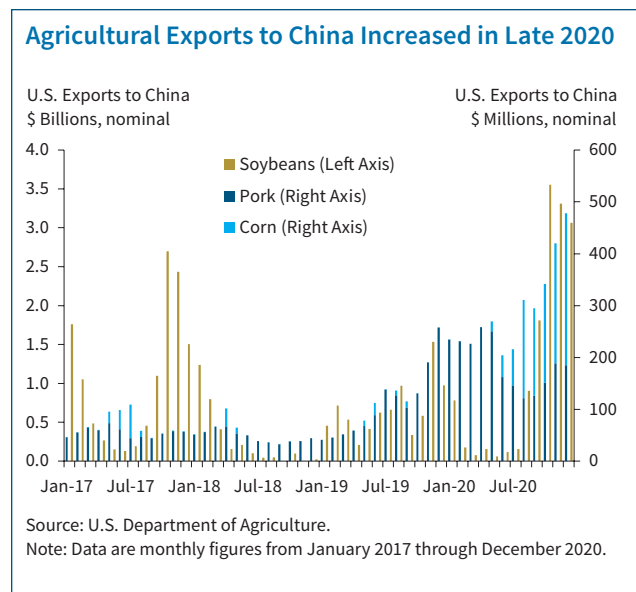


Chart 20

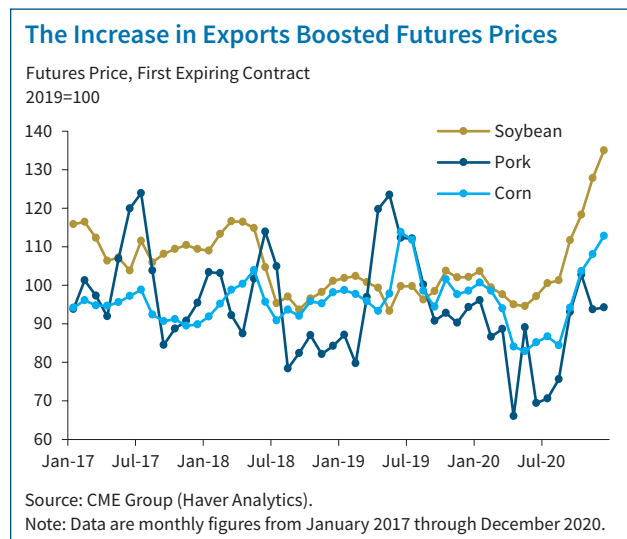
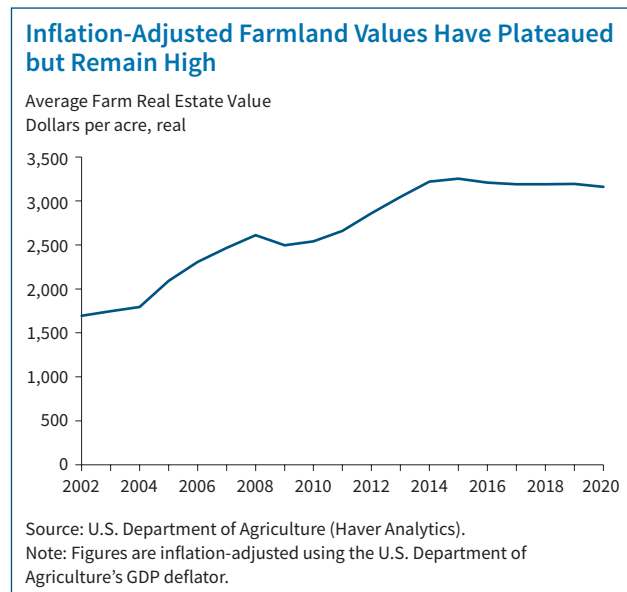


Chart 21



<sup>12</sup>USDA, 2021 Farm Sector Income Forecast, February 05, 2021, <https://www.ers.usda.gov/topics/farm-economy/farm-sector-income-finances/farm-sector-income-forecast/>.

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.<sup>13</sup>

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.

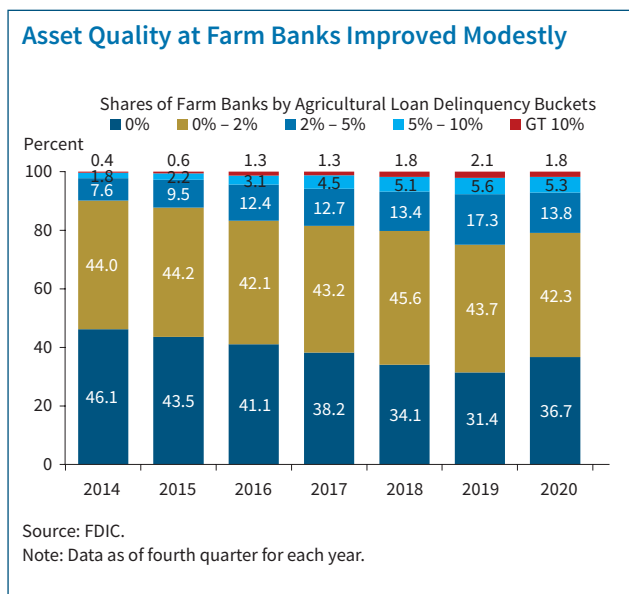
Favorable farmland values have helped cushion farmers' financial stress during periods of crop price volatility. Many farmers who had operating shortfalls in recent years have been able to restructure those shortfalls using their farmland equity. According to the USDA, farm sector equity is forecast 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.

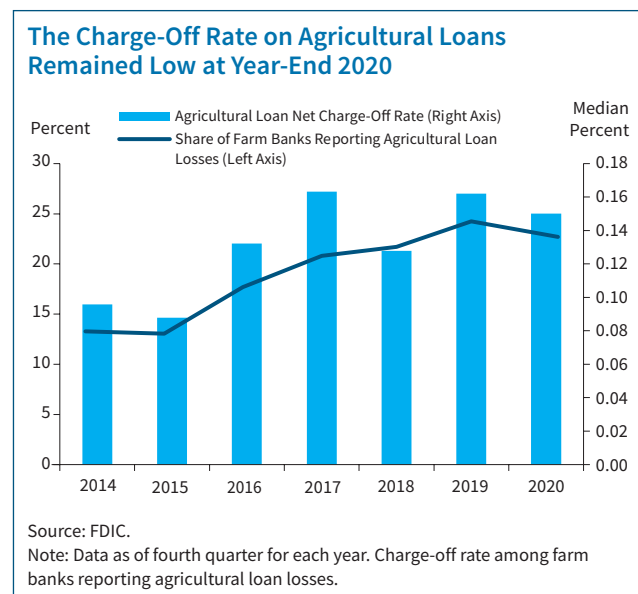
Charge-offs rates also remained low (Chart 23). As of fourth quarter 2020, just 22.7 percent of farm banks reported agricultural loan charge-offs, a slight decrease from a year earlier. The median level of agricultural loan charge-offs at these institutions was 0.15 percent, which is also down slightly 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.

**Chart 22**



**Chart 23**



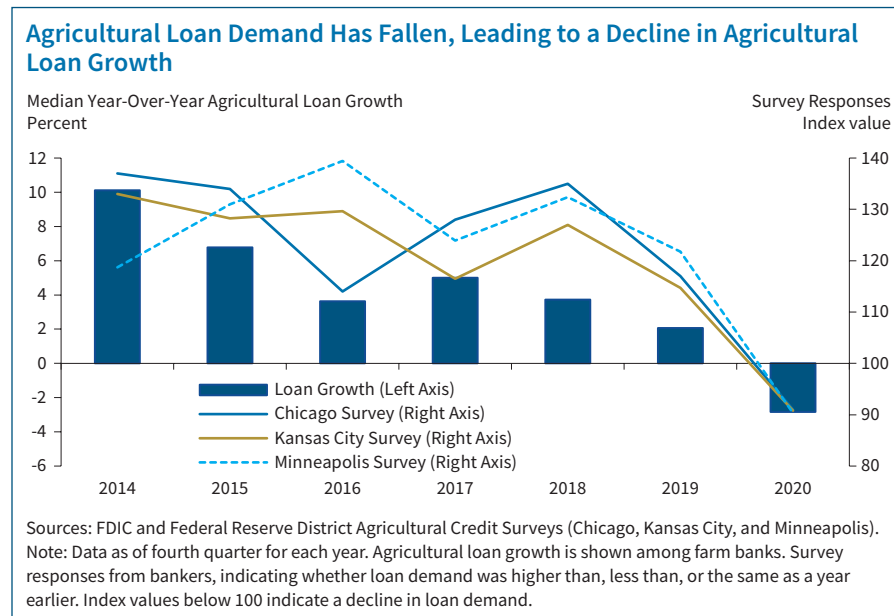
<sup>13</sup>The eight states with the highest number of highly concentrated farm banks are Illinois, Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota.

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**



# Commercial Real Estate

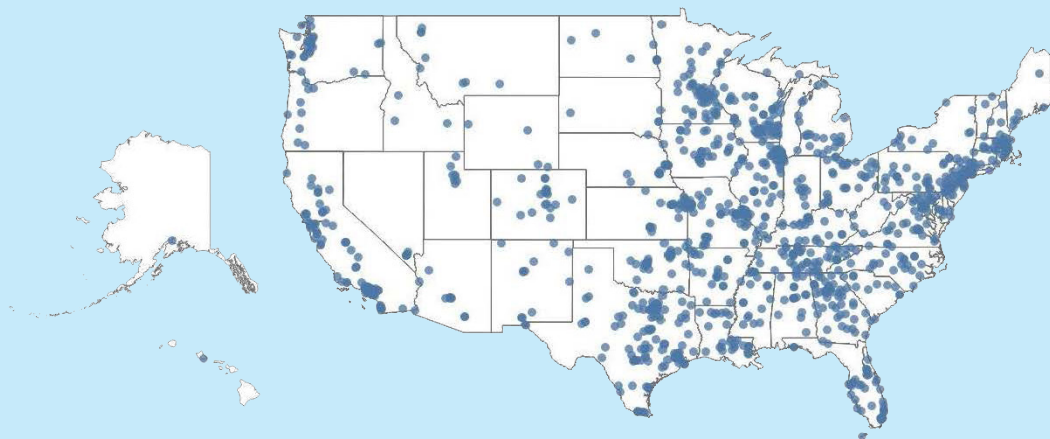
- *The pandemic challenged the CRE industry in 2020: lodging and retail sectors were hit hard early in the pandemic, and uncertainty emerged in other sectors.*
- *The pandemic's progress and potential shifts in behavior and preferences may influence the outlook for CRE.*
- *CRE loans held by FDIC-insured 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.<sup>14</sup>

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

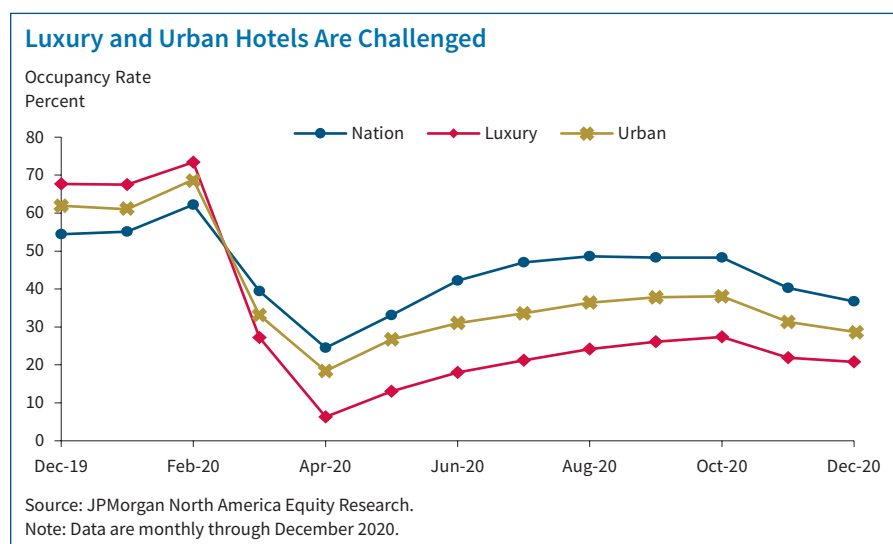
once a large share of the population is vaccinated, but the resumption of corporate travel to pre-pandemic levels is uncertain as companies re-evaluate their travel needs. Industry reports suggest that some urban hotel markets may not return to pre-pandemic revenue levels for years.

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.<sup>15</sup> According to research firm Coresight Research, store closures are expected to rise again in 2021.<sup>16</sup>

**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

**Chart 25**



<sup>14</sup>JPMorgan North America Equity Research, Lodging Weekly Trends, January 13, 2021.

<sup>15</sup>Coresight Research. Annual store closures ranged from 4,300 in 2016 to 8,700 in 2020.

<sup>16</sup>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.<sup>17</sup> 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.<sup>18</sup> 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.<sup>19</sup> 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.<sup>20</sup> 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.<sup>21</sup> 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.**<sup>22</sup> 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.<sup>23</sup> 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).<sup>24</sup> According to CoStar, sales across all property types increased by year-end 2020 from lows earlier in the year.<sup>25</sup>

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

<sup>17</sup> FDIC analysis of CoStar data. Data through fourth quarter 2020.

<sup>18</sup> Ibid.

<sup>19</sup> National Multifamily Housing Council, Rent Payment Tracker, January 8, 2021.

<sup>20</sup> Center on Budget and Policy Priorities, "Census: Income-Rent Gap Grew in 2018," September 27, 2019.

<sup>21</sup> FDIC analysis of CoStar data. Data through fourth quarter 2020.

<sup>22</sup> E-commerce is logistics-intensive, and warehouse space is required at transportation hubs and close to "last-mile" population centers. Transportation management firm Cerasis defines last-mile logistics as the final step of the delivery process from a distribution center or facility to the end user.

<sup>23</sup> FDIC analysis of CoStar data. Data through fourth quarter 2020.

<sup>24</sup> Green Street Commercial Property Price Index as of February 9, 2021.

<sup>25</sup> FDIC analysis of CoStar data. Data through fourth quarter 2020.



Chart 26

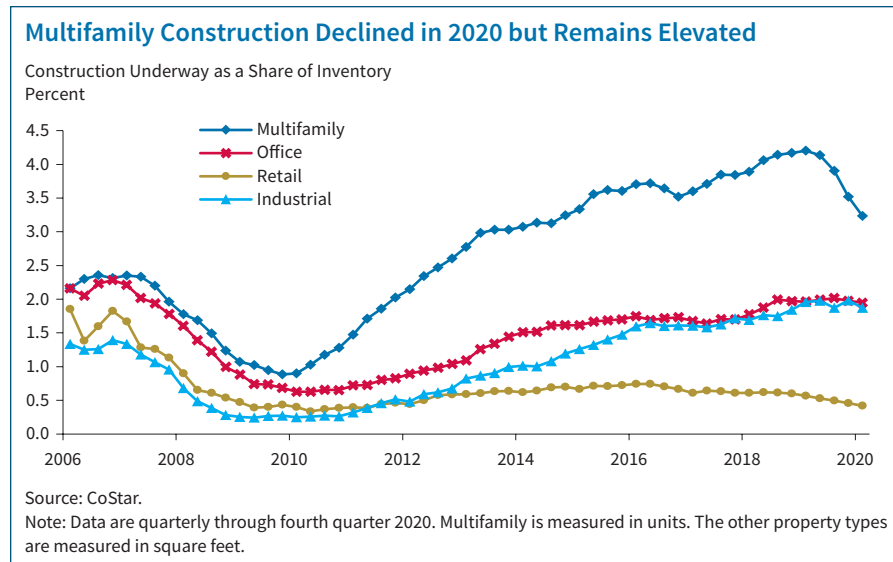
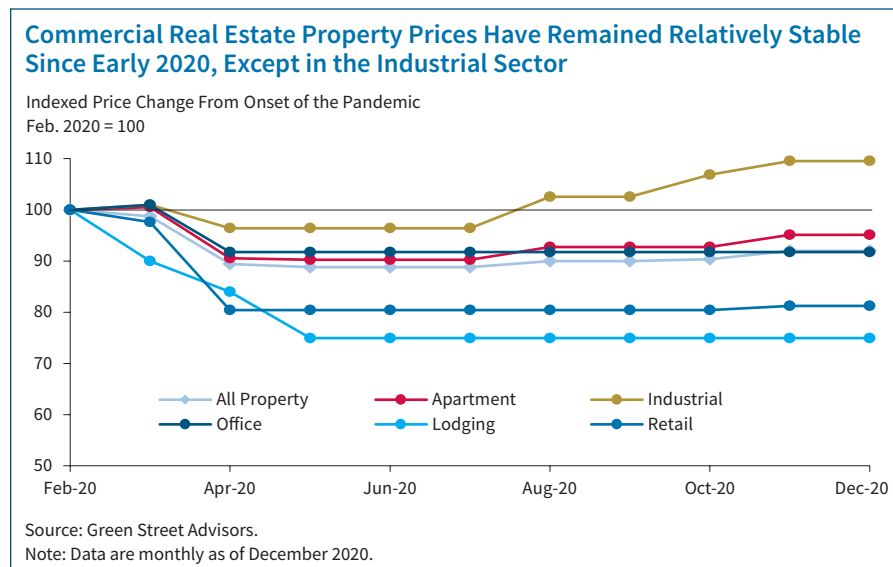


Chart 27



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.<sup>26</sup>

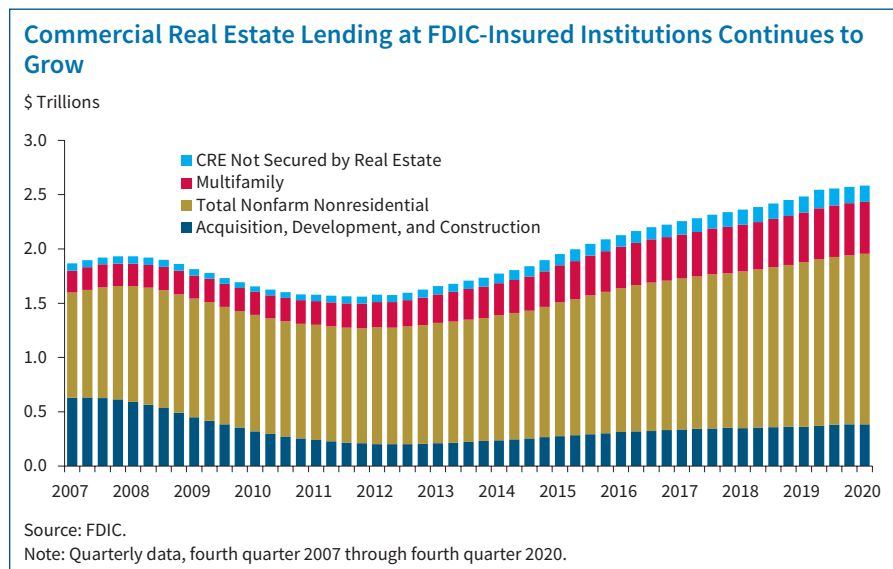
Although CRE loan balances ended 2020 at a record high, CRE loans as a percent of capital declined in 2020 and remained below the 2008 peak.<sup>27</sup> As of fourth quarter 2020, the median ratio of CRE loans to capital nationwide was about 181 percent, down slightly from

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

Chart 28



<sup>26</sup>FDIC analysis of Real Capital Analytics data.

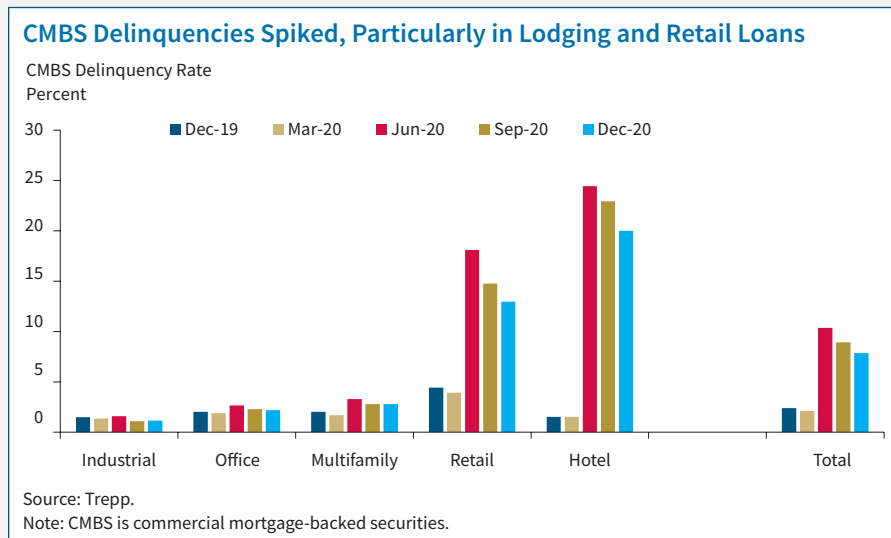
<sup>27</sup>For this analysis, capital is defined as tier 1 capital and credit loss reserves for loans and leases. An elevated concentration of CRE loans is defined as total CRE loans above 300 percent of capital, or ADC loans above 100 percent of capital.

### 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*.<sup>28</sup>

**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.

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<sup>28</sup>FDIC, *Community Banking Study*, December 2020, <https://www.fdic.gov/resources/community-banking/report/2020/2020-cbi-study-full.pdf>.

# Consumer Debt

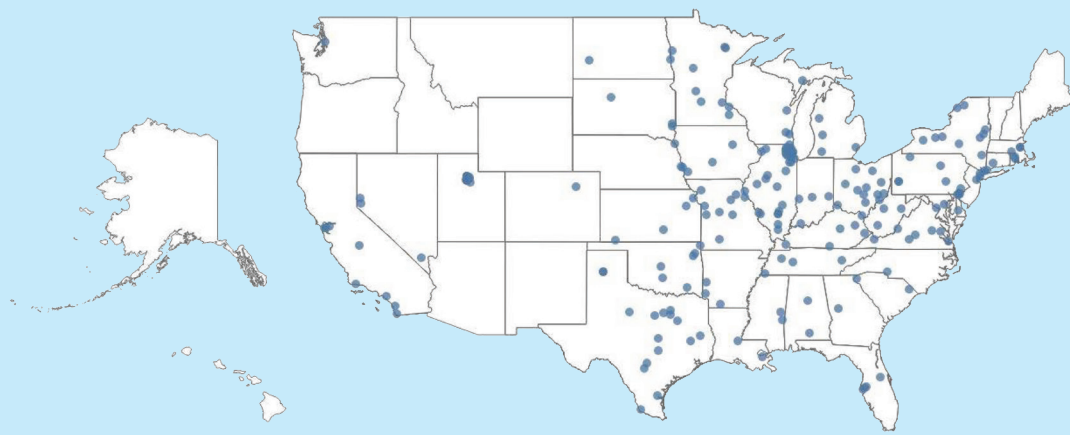
- *Government programs helped support household balance sheets and consumer loan performance during the pandemic.*
- *Consumer loan volumes declined as households pulled back on spending in 2020.*
- *Consumer conditions may be a key source of credit risk, especially if support for consumers runs out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

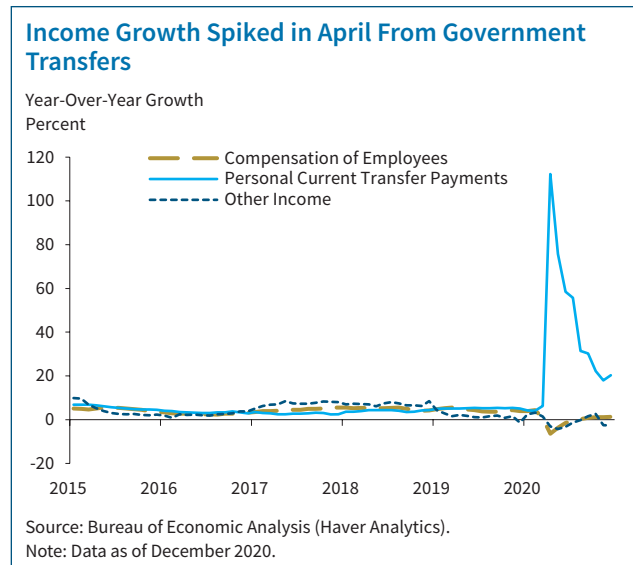
**Government support programs helped boost household income growth in 2020.** U.S. personal income growth rose to 14 percent from a year earlier in April 2020, up from 3 percent in December 2019 (Chart 29). The increase was almost entirely due to pandemic relief in the form of government stimulus programs, 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.<sup>29</sup> 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.<sup>30</sup>

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,

Chart 29



including restaurants, hotels, travel, and general retail.<sup>31</sup> 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.<sup>32</sup> 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

<sup>29</sup> Payments 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.

<sup>30</sup> Thesia I. Garner, Adam Safir, and Jake Schild, "Receipt and Use of Stimulus Payments in the Time of the COVID-19 Pandemic," U.S. Bureau of Labor Statistics, *Beyond the Numbers* 9, no. 10 (August 2020), <https://www.bls.gov/opub/btn/volume-9/pdf/receipt-and-use-of-stimulus-payments-in-the-time-of-the-covid-19-pandemic.pdf>; and Peter G. Peterson Foundation, "How Did Americans Spend Their Stimulus Checks and How Did it Affect the Economy?" October 9, 2020, <https://www.pgp.org/blog/2020/10/how-did-americans-spend-their-stimulus-checks-and-how-did-it-affect-the-economy>.

<sup>31</sup> Data from <https://tracktherecovery.org/>.

<sup>32</sup> Board of Governors of the Federal Reserve System, Senior Loan Officer Opinion Survey on Bank Lending Practices, July 2020, <https://www.federalreserve.gov/data/sloos/sloos-202007-table-1.htm>.

Chart 30

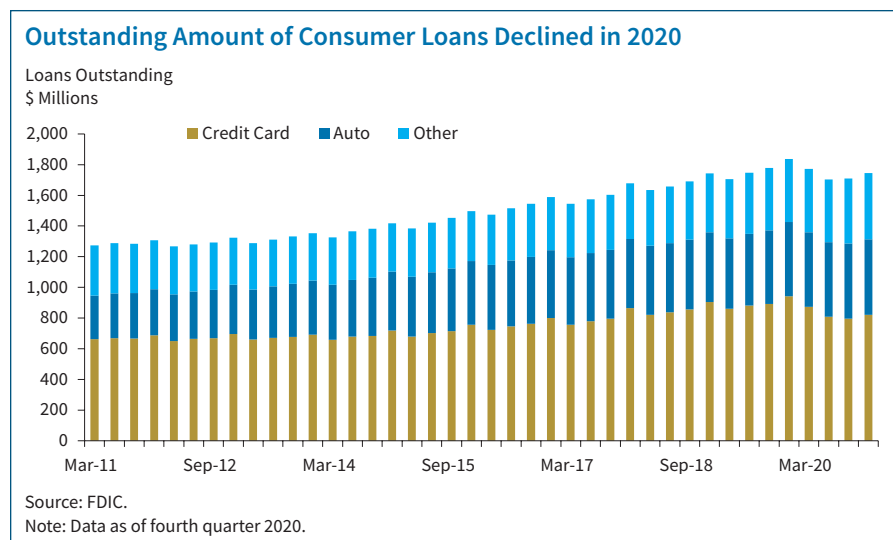
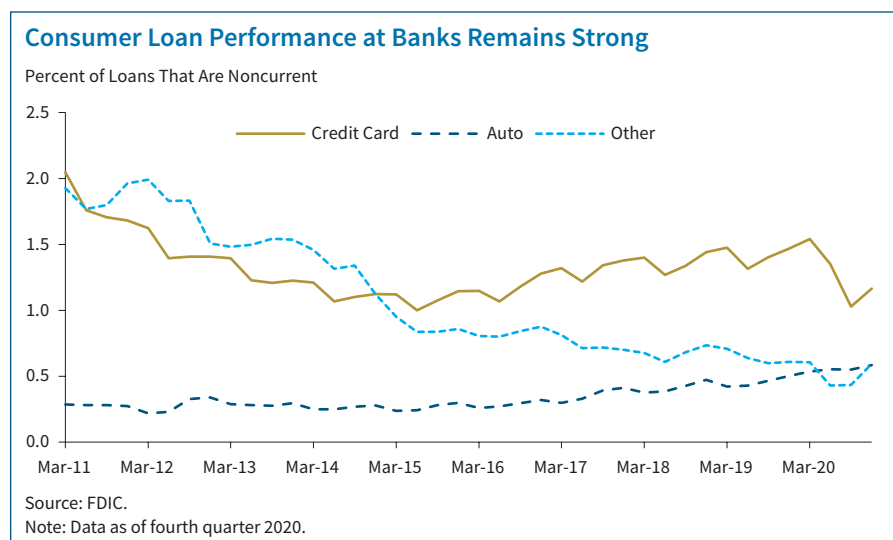


Chart 31



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.<sup>33</sup> 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.

<sup>33</sup> 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

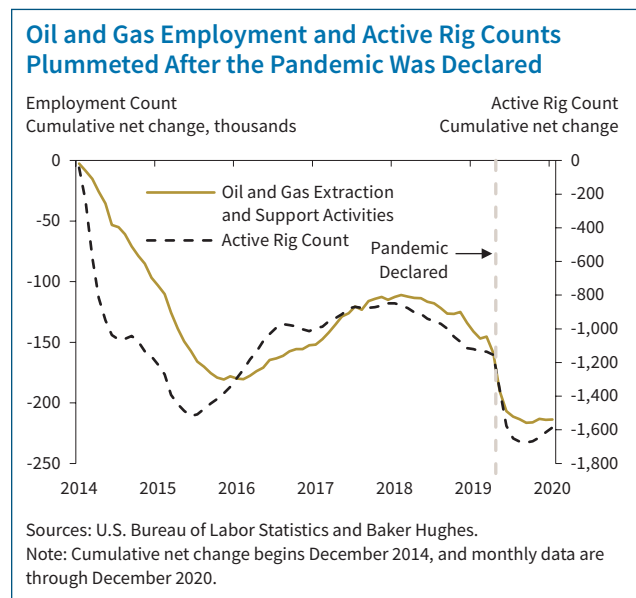
decade to record levels, this business model produced extremely weak financial performance. Among the 11 sectors of the S&P 500 Index, energy continued a trend as the worst performing sector in 2020, and exploration and production (E&P) firms fared particularly poorly (Chart 33).

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.<sup>34</sup>

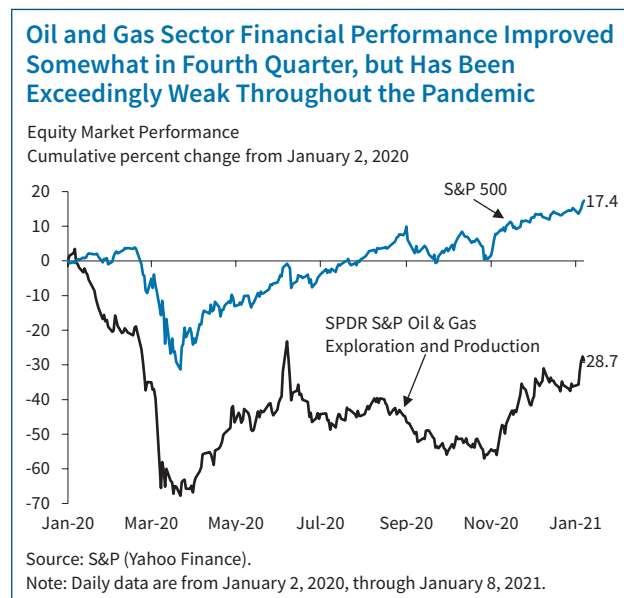
Weak financial performance, high leverage, and low oil prices also prompted an escalation in North American oil and gas producer bankruptcies in 2020. Approximately \$53.8 billion of energy debt was taken into bankruptcy in the 11 months through November 2020, the highest amount since 2016 and more than twice that of 2019.<sup>35</sup>

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

**Chart 32**



**Chart 33**



<sup>34</sup> Fitch Ratings, High Yield Default Insight Report, March 11, 2021.

<sup>35</sup> Haynes and Boone, LLP, Oil Patch Bankruptcy Monitor, November 30, 2020.

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.

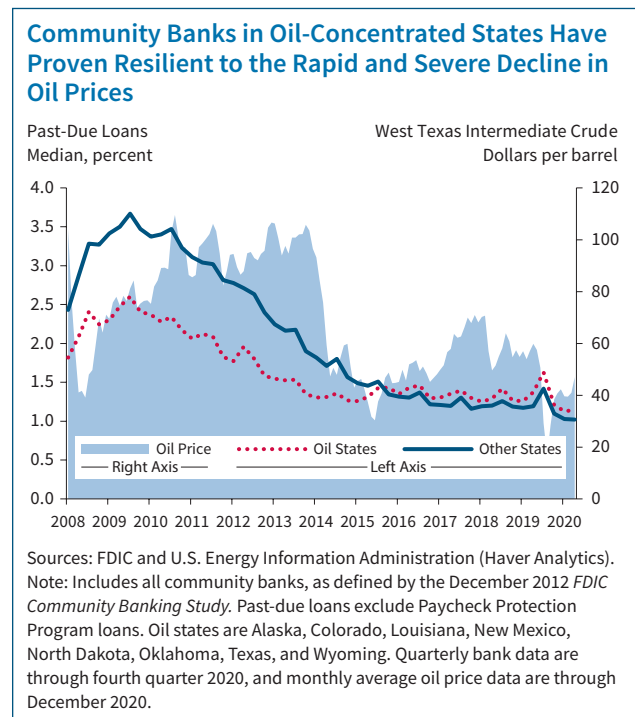
Although it may be too early to fully assess the current cycle, asset quality deterioration in geographies that rely on the energy sector has been mild, despite weak labor market fundamentals. At fourth quarter 2020, the past-due loan rate for community banks headquartered in oil-reliant states was 1.1 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.<sup>36</sup> 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.<sup>37</sup> 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 tend 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

**Chart 34**



<sup>36</sup> 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.

<sup>37</sup> Board of Governors of the Federal Reserve System, Federal Deposit Insurance Corporation, Office of the Comptroller of the Currency, Shared National Credit Program, First and Third Quarter 2020 Reviews, February 2021.

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

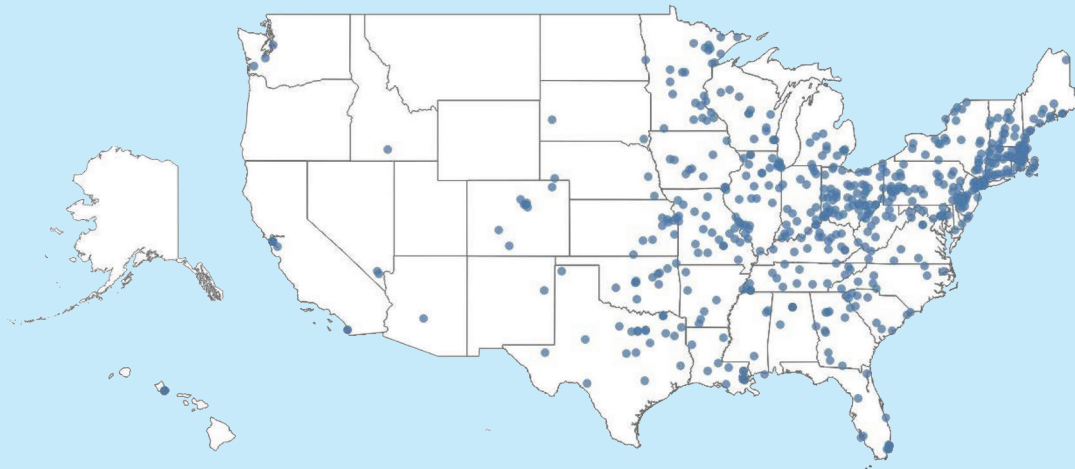
- *Housing activity recovered strongly in 2020; single-family sales reached a 14-year high after a sharp drop in activity at the onset of the pandemic.*
- *Loan performance metrics of 1–4 family residential mortgage loans at FDIC-insured institutions weakened slightly in 2020.*
- *Increasing competition 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).<sup>38</sup> 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.<sup>39</sup> 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.<sup>40</sup>

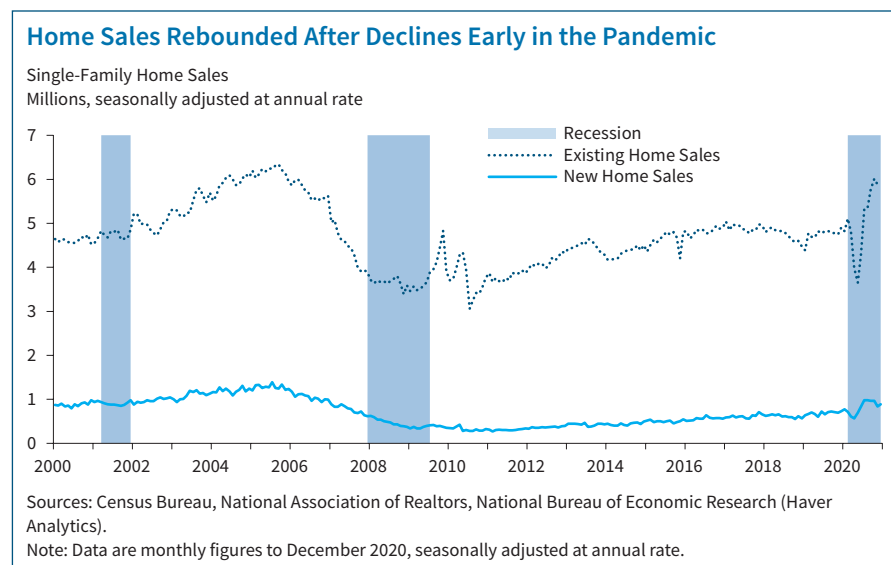
The high level of home sales reflected strong demand for single-family homes that was due to a growing desire for more space to accommodate remote work, a shift in homebuyer preferences from densely populated urban areas to suburban markets, and record low mortgage rates. Home buyers and sellers also 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.<sup>41</sup>

**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).<sup>42</sup>

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

**Chart 35**



<sup>38</sup> National Association of Realtors.

<sup>39</sup> Existing single-family home sales from the National Association of Realtors, and new single-family home sales from the U.S. Census Bureau.

<sup>40</sup> Ibid.

<sup>41</sup> CoreLogic. Generation X was born between 1965 and 1979. Millennials were born between 1980 and 1998.

<sup>42</sup> National Association of Realtors. Months' supply of single-family homes data begin in 1983.

Chart 36

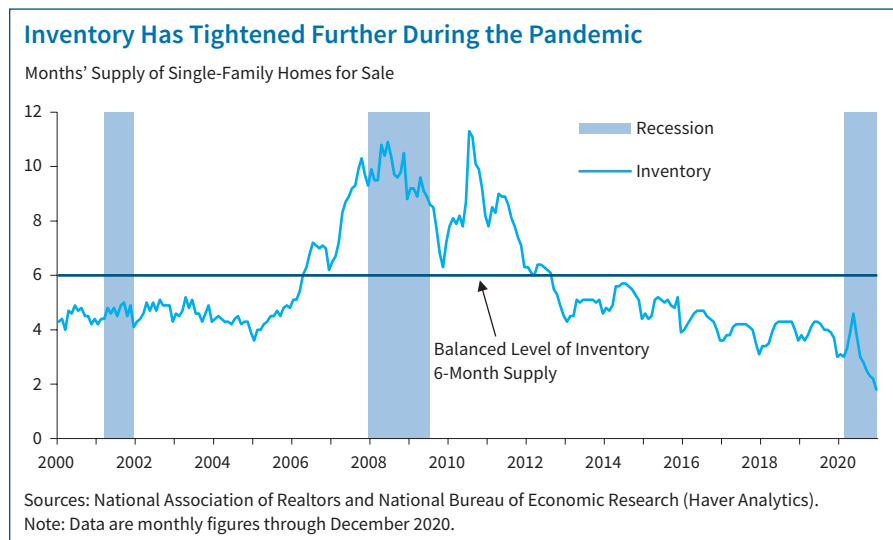
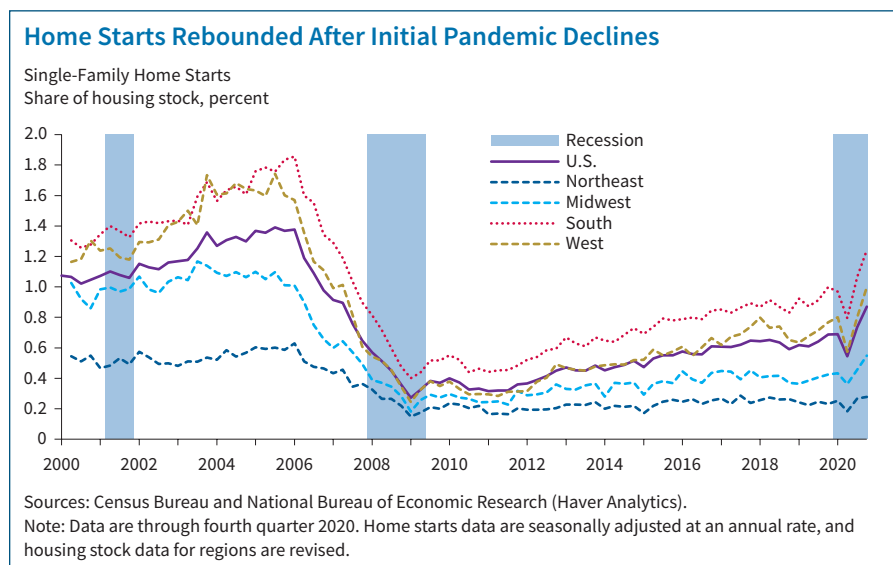


Chart 37



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.<sup>43</sup> Home prices rose across all states but increased most in Idaho, Arizona, and Utah, where population growth has been strong.<sup>44</sup>

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

<sup>43</sup> S&P CoreLogic Case-Shiller Home Price Index.

<sup>44</sup> Federal Housing Finance Agency, All Transactions House Price Index.



decline was in San Francisco, followed by smaller, marginal declines in nearby San Rafael, and energy-focused Midland.<sup>45</sup> 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.<sup>46</sup> 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**

### 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.

<sup>45</sup> Ibid. Metro division data for San Francisco and San Rafael, California, and metro area data for Midland, Texas.

<sup>46</sup> One-to-four family residential loans exclude revolving and open-end loans.

**low.** 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.<sup>47</sup> 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.<sup>48</sup> The decline was due to an increased number of mortgages exiting forbearance and reduced new entrants.

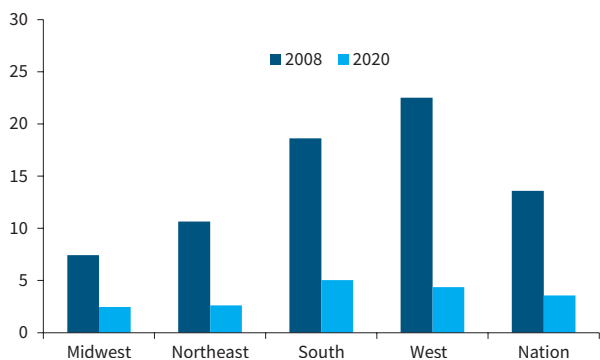
**Strong mortgage loan origination volume contributed to higher mortgage-related revenues in 2020.**<sup>49</sup> As mortgage rates reached record lows and home sales grew during the year, banks that conduct mortgage lending reported higher revenues on increased 1–4 family loan originations (originations) and loan sales (sales). These banks originated \$967 billion in 2020, up 30.3 percent from 2019.<sup>50</sup> 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.

**Chart 38**

**The Share of Insured Banking Institutions With High 1–4 Family Residential Construction Loans Has Significantly Declined**

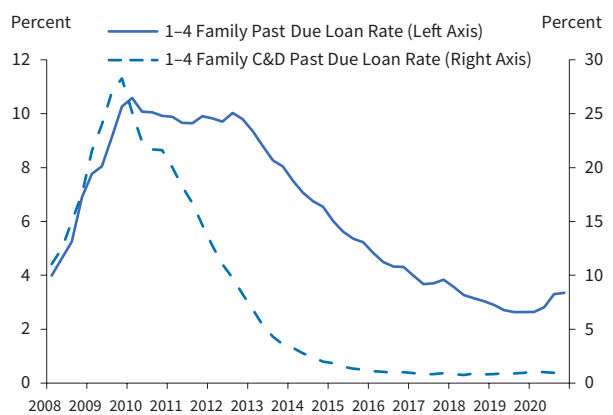
Share of Insured Banking Institutions With 1–4 Family Construction Loans at 50 Percent or More of Capital



Source: FDIC.

**Chart 39**

**One-to-Four Family Residential Loan Portfolios Are Reporting Asset Quality Deterioration**



Source: FDIC.

Note: Data as of fourth quarter 2020.

<sup>47</sup> Noncurrent 1–4 family residential loans are those secured by 1–4 residential properties 90 days or more past due and nonaccrual status. The largest institutions are those with at least \$100 billion in total assets.

<sup>48</sup> Mortgage Bankers Association, “Share of Mortgage Loans in Forbearance Decreases to 4.90 percent,” April 5, 2021.

<sup>49</sup> Mortgage banking activity includes the sale, securitization, and servicing of 1–4 family loans.

<sup>50</sup> Nationally, 501 insured institutions reported mortgage loan originations and 957 institutions reported mortgage loan sales on their Consolidated Report of Conditions and Income in fourth quarter 2020. The 501 institutions that reported originations reported 88 percent of the sales.

**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.<sup>51</sup> 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.<sup>52</sup> 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.<sup>53</sup> 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.<sup>54</sup> 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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<sup>51</sup> Inside Mortgage Finance, “Inside Mortgage Finance,” September 22, 2017; February 2, 2018; January 29, 2021; and February 5, 2021.

<sup>52</sup> See Kayla Shoemaker, “Trends in Mortgage Origination and Servicing: Nonbanks in the Post-Crisis Period,” *FDIC Quarterly* 13, no. 4 (2019), <https://www.fdic.gov/bank/analytical/quarterly/2019-vol13-4/fdic-v13n4-3q2019-article3.pdf>; and FDIC, *Community Banking Study*, December 2020, <https://www.fdic.gov/resources/community-banking/report/2020/2020-cbi-study-full.pdf>.

<sup>53</sup> Federal Reserve Bank of New York, “Household Debt and Credit Report, Q4 2020,” <https://www.newyorkfed.org/microeconomics/hhdc.html>.

<sup>54</sup> CoreLogic, Homeowner Equity Insights Report, Fourth Quarter 2020.

## 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 through 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).<sup>55</sup> 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.<sup>56</sup> 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.<sup>57</sup>

**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).<sup>58</sup> 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

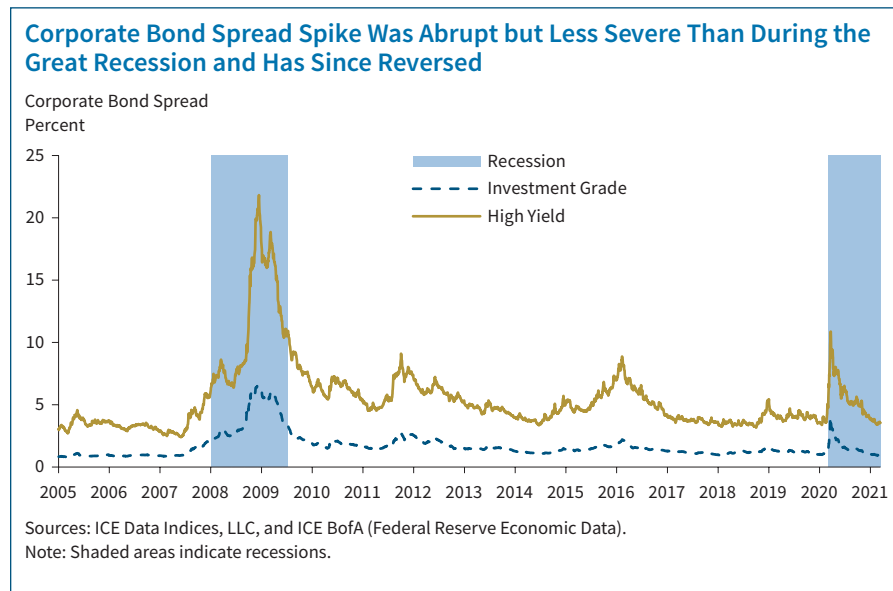
<sup>55</sup> ICE BofA High Yield Index option-adjusted spread and ICE BofA U.S. Corporate Index option-adjusted spread.

<sup>56</sup> S&P Global Market Intelligence, Leveraged Commentary and Data, Interactive High-Yield Bond Report and Leveraged Loan Interactive Volume Report.

<sup>57</sup> Board of Governors of the Federal Reserve System, Enhanced Financial Accounts.

<sup>58</sup> 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.

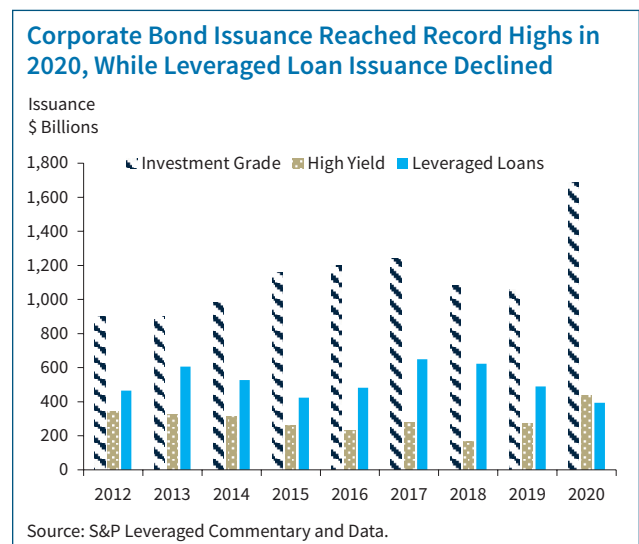
Chart 40



by third quarter 2020.<sup>59</sup> 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.<sup>60</sup> 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.<sup>61</sup>

**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.<sup>62</sup> 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.<sup>63</sup>

Chart 41



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

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

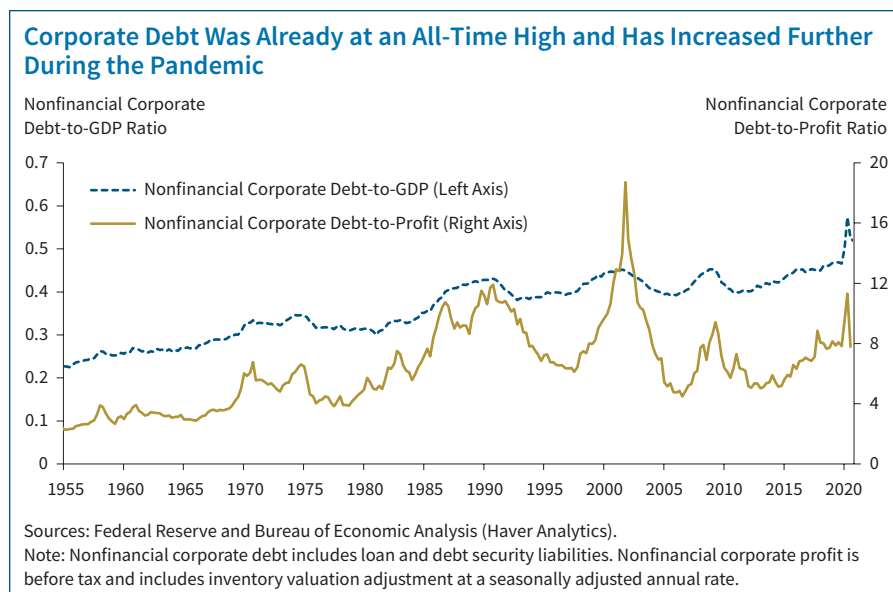
<sup>60</sup> FDIC, *2019 Risk Review*, <https://www.fdic.gov/analysis/risk-review/2019-risk-review.html>.

<sup>61</sup> S&P Global Market Intelligence, "U.S. Corporate Bankruptcies End 2020 at 10-Year High Amid COVID-19 Pandemic," January 5, 2021, <https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/us-corporate-bankruptcies-end-2020-at-10-year-high-amid-covid-19-pandemic-61973656>.

<sup>62</sup> Fitch Ratings, "Fitch U.S. High Yield Default Insight," October 9, 2020, <https://www.fitchratings.com/research/corporate-finance/fitch-us-high-yield-default-insight-hy-default-rate-elevated-through-2022-poised-to-finish-at-5-5-in-2020-09-10-2020>; and S&P Global Market Intelligence, "2021 Leveraged Loan Survey: Defaults Edge Higher; Credit Quality a Concern," December 18, 2020, <https://www.spglobal.com/marketintelligence/en/news-insights/blog/2021-leveraged-loan-survey-defaults-edge-higher-credit-quality-a-concern>.

<sup>63</sup> S&P Global Market Intelligence, *Leveraged Commentary and Data, Quarterly Leveraged Lending Review, Fourth Quarter 2020*.

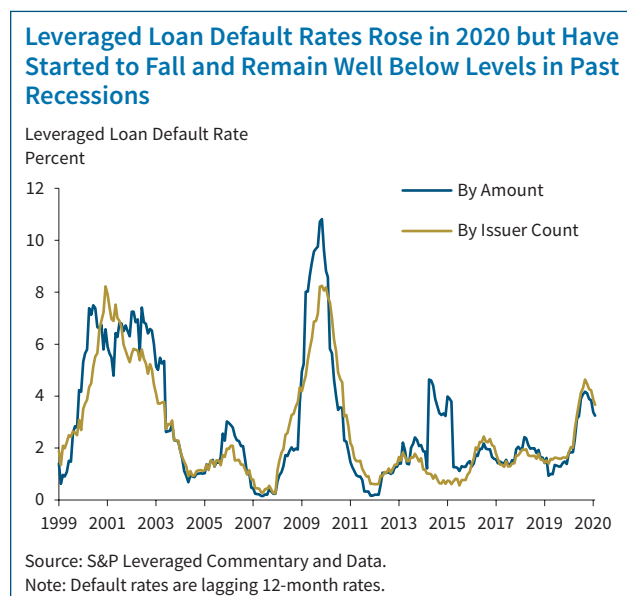
Chart 42



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.<sup>64</sup> 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).<sup>65</sup>

Chart 43



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.<sup>66</sup> Bank CLO holdings are likely less risky than the leveraged loans they hold directly, as banks tend to

<sup>64</sup> S&P Global Ratings, “Credit Trends – Global Refinancing – Rated Corporate Debt Due Through 2025 Totals \$11.3 Trillion,” February 8, 2021, <https://www.spglobal.com/ratings/en/research/articles/210208-credit-trends-global-refinancing-rated-corporate-debt-due-through-2025-totals-11-3-trillion-11828370>.

<sup>65</sup> Board of Governors of the Federal Reserve System, Enhanced Financial Accounts.

<sup>66</sup> 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.



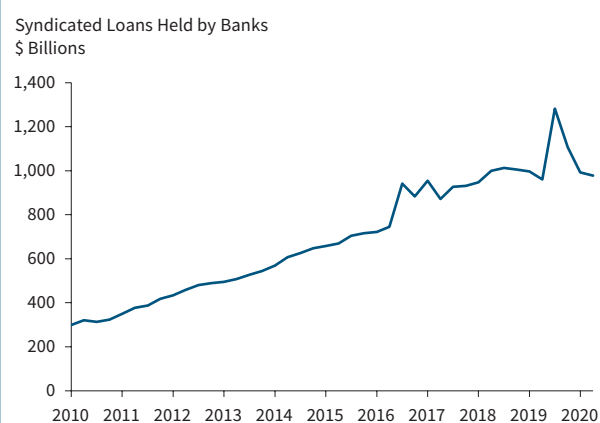
predominantly hold higher-rated CLO tranches.<sup>67</sup> Large banks also arrange most leveraged loan issuances and provide warehouse financing to new CLOs, which can put them at risk in times of disruption in leveraged loan markets as they could take losses on warehouse loans or be forced to retain 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.<sup>68</sup> 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.<sup>69</sup> 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**

**Chart 44**

**Syndicated Loans Held by Banks Have Fallen Since Spiking in Early 2020, but Remain Well Above Levels From Past Years**



Source: Federal Reserve Board Enhanced Financial Accounts (Haver Analytics).

**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.

<sup>67</sup> Laurie DeMarco, Emily Liu, and Tim Schmidt-Eisenlohr, “Who Owns U.S. CLO Securities? An Update by Tranche,” Board of Governors of the Federal Reserve System, FEDS Notes, June 25, 2020, <https://www.federalreserve.gov/econres/notes/feds-notes/who-owns-us-clo-securities-an-update-by-tranche-20200625.htm>.

<sup>68</sup> S&P Global Market Intelligence, Leveraged Commentary and Data, Leveraged Loan Interactive Volume Report; and Tyler Udland, “Quick Take – After Recent Surge, U.S. Leveraged Loan Prices Reach Pre-Pandemic Levels,” S&P Global Market Intelligence, January 14, 2021, <https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/after-recent-surge-us-leveraged-loan-prices-reach-pre-pandemic-levels-62105868>.

<sup>69</sup> S&P Global Market Intelligence, “From Crisis to Crisis – March 2020 U.S. Leveraged Loan Market Rivals 2008,” April 3, 2020, <https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/from-crisis-to-crisis-8211-march-2020-us-leveraged-loan-market-rivals-2008-57882776>; and S&P Global Market Intelligence, Leveraged Commentary and Data, “LCD Quarterly Review,” Fourth Quarter 2020, [https://www.lcdcomps.com/lcd/download/15021/LCD-Quarterly\\_2020Q4.pptx?rid=910&method=downloadResearchFile](https://www.lcdcomps.com/lcd/download/15021/LCD-Quarterly_2020Q4.pptx?rid=910&method=downloadResearchFile).



# 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.*

**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.

**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).<sup>70</sup> 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 of all 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.<sup>71</sup> 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

<sup>70</sup> 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.

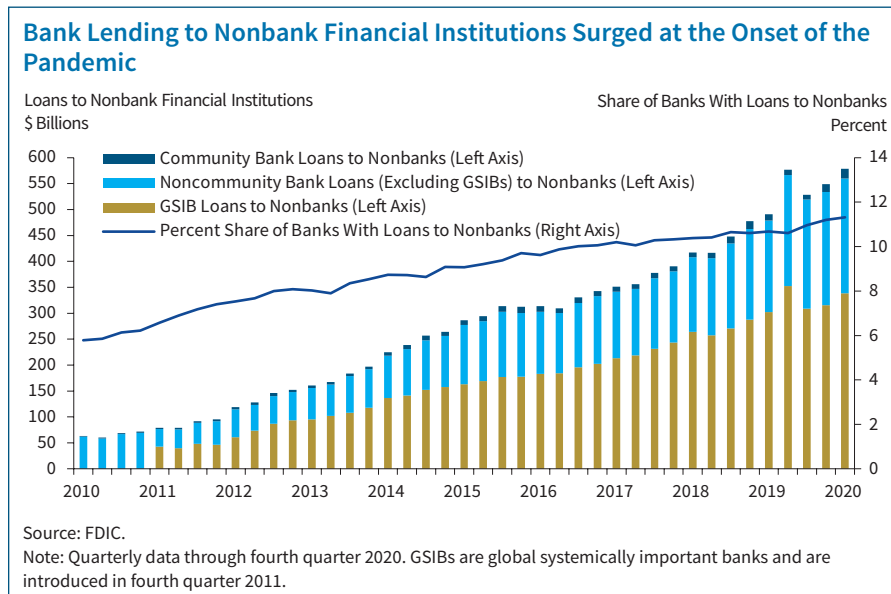
<sup>71</sup> Sergey Chernenko, Isil Erel, and Robert Prilmeier, "Why Do Firms Borrow Directly From Nonbanks?" (Working Paper, no. 26458, National Bureau of Economic Research, November 2019, Revised August 2020), <https://www.nber.org/papers/w26458>.

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

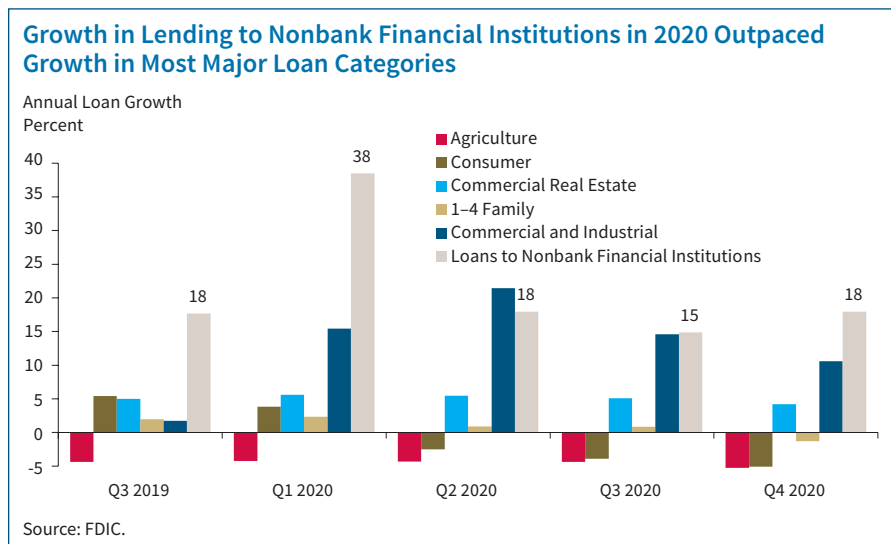
**Banks were an important source of funding for nonbank financial institutions in 2020.** Because of the direct and indirect risks inherent in these loans, lending

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**



**Chart 46**



# Small Business Lending

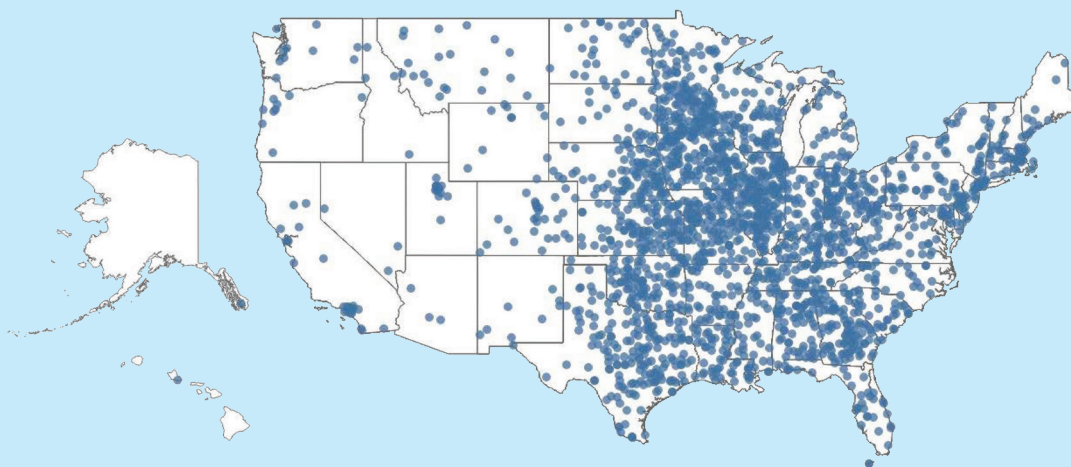
- *Small business conditions weakened significantly at the onset of the pandemic as stay-at-home orders and changing consumer behavior reduced business activity.*
- *Small business lending increased in 2020, primarily because of government programs such as the PPP.*
- *Small business closures and bankruptcies 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.

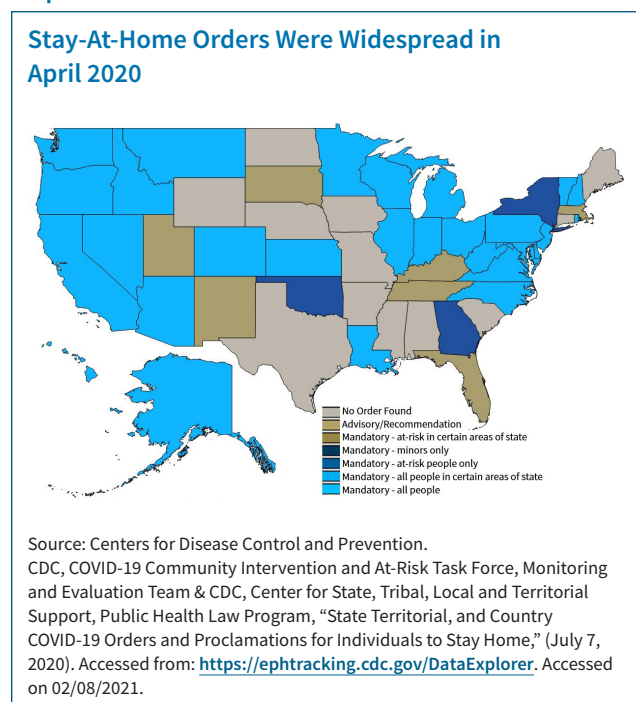
Banks played a key role in funding small businesses throughout 2020, often in conjunction with federal programs such as the PPP. Outside of the PPP, demand for business loans fell and underwriting standards tightened. While asset quality remained at manageable

levels at year-end 2020, the long-term effect of the pandemic on small business asset quality is uncertain.

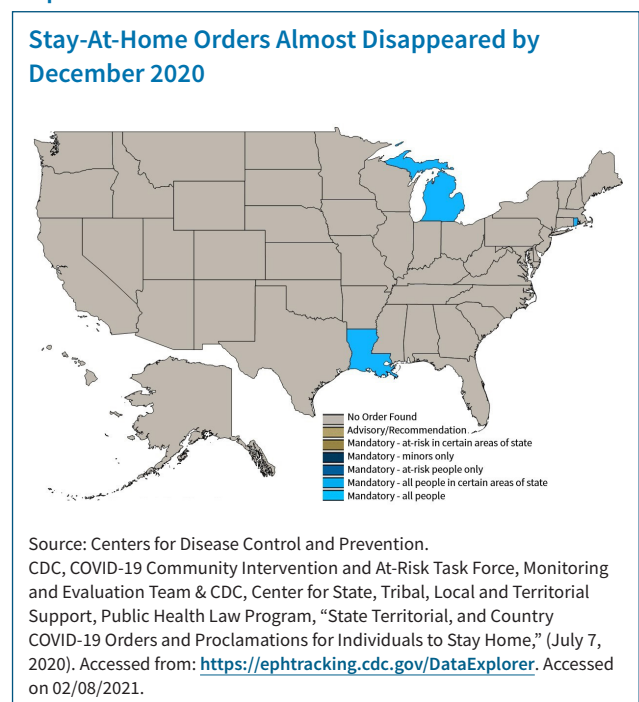
**Stay-at-home orders had various effects on small businesses.** Stay-at-home orders were instituted in many cities, counties, and states at the onset of the pandemic (Map 2). These orders caused many small businesses to limit capacity, shift business models, lay off employees, or close. Many initial 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.<sup>72</sup> 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.<sup>73</sup> Second quarter

Map 2



Map 3



<sup>72</sup> Yelp Economic Average, Third Quarter 2020 Report, October 2020, <https://www.yelpeconomicaverage.com/yea-q3-2020.html>.

<sup>73</sup> 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&categories=underlying&thetable](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&categories=underlying&thetable).

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.

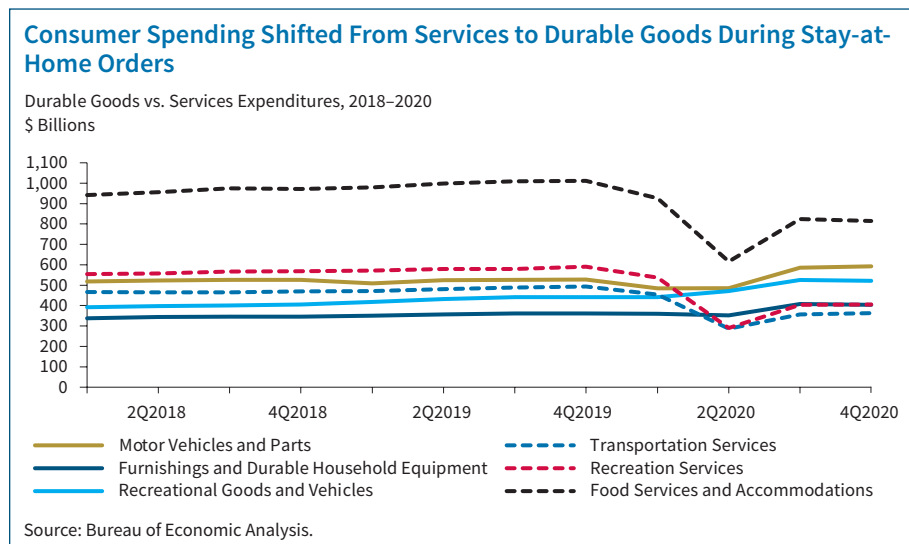
**Business closures and bankruptcies vary by business type and size.** Business closures have risen dramatically since the start of the pandemic. As of August 31, 2020, more than 163,000 businesses listed on Yelp closed and approximately 98,000 closed permanently, a rate of 1.96 percent based on the 4.9 million active business listings on Yelp.<sup>74</sup> According to data from Womply, open

businesses declined approximately 29 percent between January 2020 and December 2020.<sup>75</sup>

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.<sup>76</sup>

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.<sup>77</sup> 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

Chart 47



<sup>74</sup> Yelp, Local Economic Impact Report, September 2020, <https://www.yelpeconomicaverage.com/business-closures-update-sep-2020.html>; and Yelp Inc., 2019 Annual Report, <http://d18rn0p25nwr6d.cloudfront.net/CIK-0001345016/360caaf2-1804-462c-a5db-460952da09e2.pdf>.

<sup>75</sup> 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.

<sup>76</sup> Moody's Investor Service, "Gaming, Lodging, Cruising, and Restaurants – U.S. Outlook 2021," December 14, 2020, and "Retail and Apparel – U.S.: Outlook 2021," December 3, 2020.

<sup>77</sup> American Bankruptcy Institute, Commercial Bankruptcy Filings, All Chapters, January 2021, <https://www.abi.org/newsroom/bankruptcy-statistics>.

Table 1

Type of Bankruptcy Filing (Commercial Only)	2019 Filings (Number)	2020 Filings (Number)	Year-Over-Year Change (Percent)	March–December 2019 Filings (Number)	March–December 2020 Filings (Number)	Change Between Mar–Dec 2019 and Mar–Dec 2020 (Percent)
Chapter 7 Filings	22,834	19,220	(15.8)	19,492	15,565	(20.1)
Chapter 11 Filings	5,519	7,128	29.2	4,468	5,949	33.1
<b>Total Filings</b>	<b>28,353</b>	<b>26,348</b>	<b>(7.1)</b>	<b>23,960</b>	<b>21,514</b>	<b>(10.2)</b>

Source: American Bankruptcy Institute.

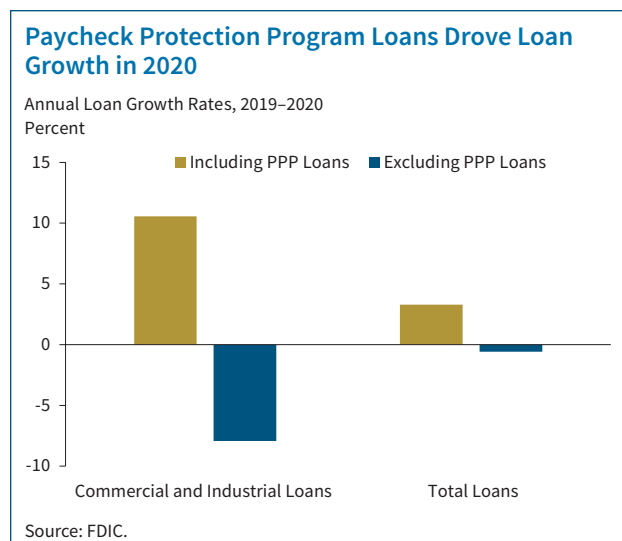
tend to file Chapter 7 rather than Chapter 11, have benefited from various federal programs, while large corporations continue to use the bankruptcy system.<sup>78</sup>

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.<sup>79</sup> 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.<sup>80</sup>

Chart 48



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

<sup>78</sup> Jialan Wang, Jeyul Yang, Benjamin Charles Iverson, and Raymond Kluender, “Bankruptcy and the COVID-19 Crisis,” (Working Paper, no. 21-041, Harvard Business School, September 10, 2020), [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3690398](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3690398).

<sup>79</sup> Margaret Hanrahan and Angela Hinton, “The Importance of Community Banks in Paycheck Protection Program Lending,” *FDIC Quarterly* 14, no. 4 (December 2020), <https://www.fdic.gov/bank/analytical/quarterly/2020-vol14-4/article1.pdf>.

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



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.<sup>81</sup>

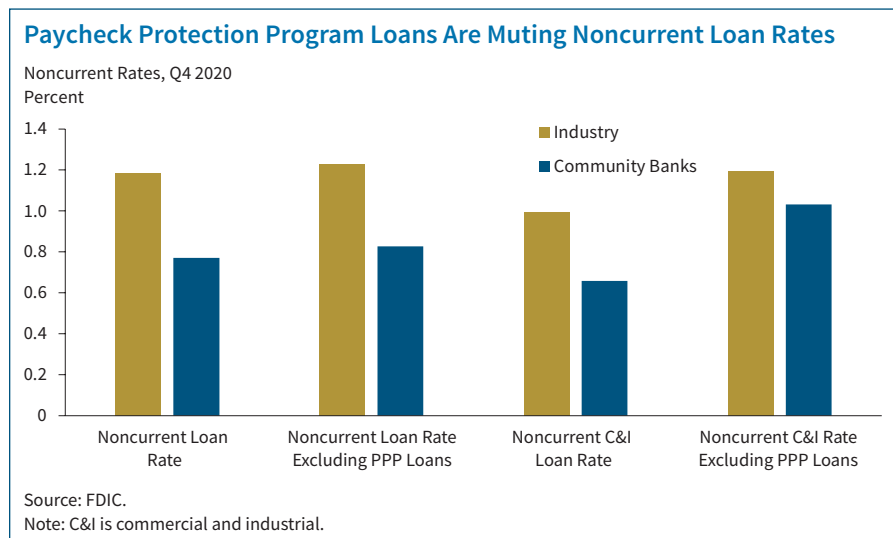
When excluding PPP loans, the C&I noncurrent rate increases another 20 basis points to 1.19 percent (Chart 49). The C&I noncurrent rate at community banks declined 23 basis points to 0.66 percent from fourth quarter 2019. Again, this rate is affected by PPP loan originations. Excluding PPP loans, the 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."<sup>82</sup> 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

Chart 49



<sup>81</sup> 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.

<sup>82</sup> William C. Dunkelberg and Holly Wade, "NFIB Small Business Economic Trends," National Federation of Independent Businesses, December 2020.



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.<sup>83</sup>

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.<sup>84</sup> The NFIB Optimism Index took 20 months to rebound to its November 2007 level after the Great Recession.<sup>85</sup>

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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<sup>83</sup> The Federal Reserve's Beige Book reports on regional economic conditions and prospects in the 12 Federal Reserve Districts based on mostly qualitative information gathered from District banks and other sources, including businesses, economists, and market experts. See Board of Governors of the Federal Reserve System, The Beige Book: Summary of Commentary on Current Economic Conditions by Federal Reserve District, January 13, 2021, [https://www.federalreserve.gov/monetarypolicy/files/BeigeBook\\_20210113.pdf](https://www.federalreserve.gov/monetarypolicy/files/BeigeBook_20210113.pdf).

<sup>84</sup> 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.

<sup>85</sup> NFIB Optimism Index data using Great Recession dates of December 2007 through June 2009.

# MARKET RISK

## Interest Rate Risk and Net Interest Margin

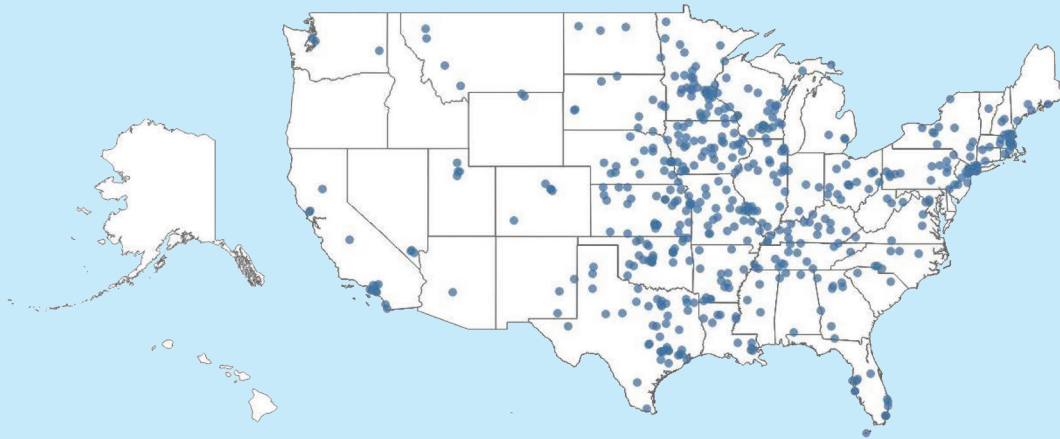
- *The low interest rate environment challenged banking sector profitability in 2020 as net interest margins (NIMs) narrowed to a record low.*
- *The large increase in deposits coupled with decreased loan demand in 2020 pose interest rate risk challenges for banks.*
- *Community bank net interest income 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

**Chart 50**

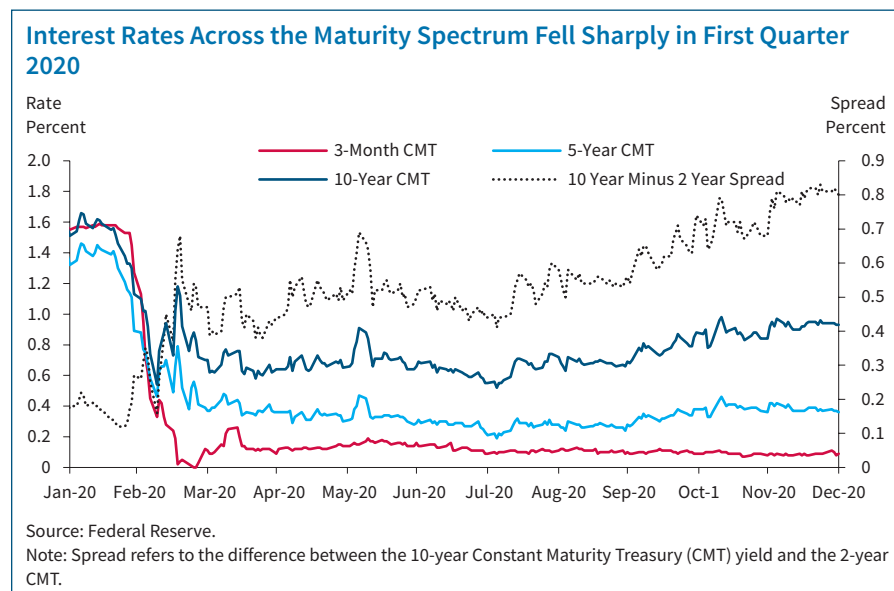
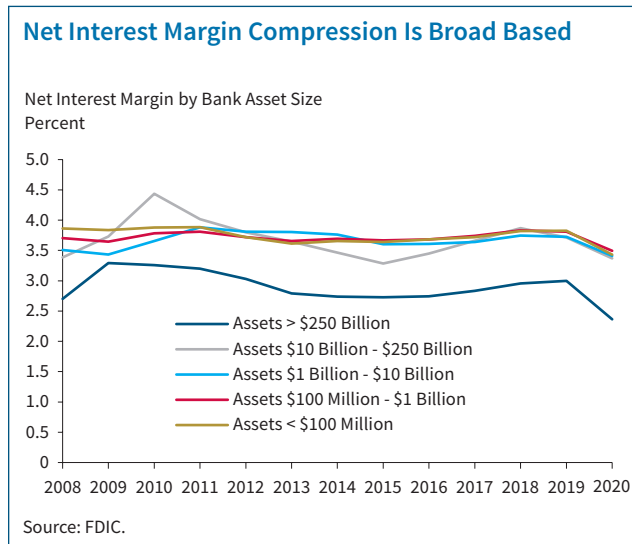


Chart 51



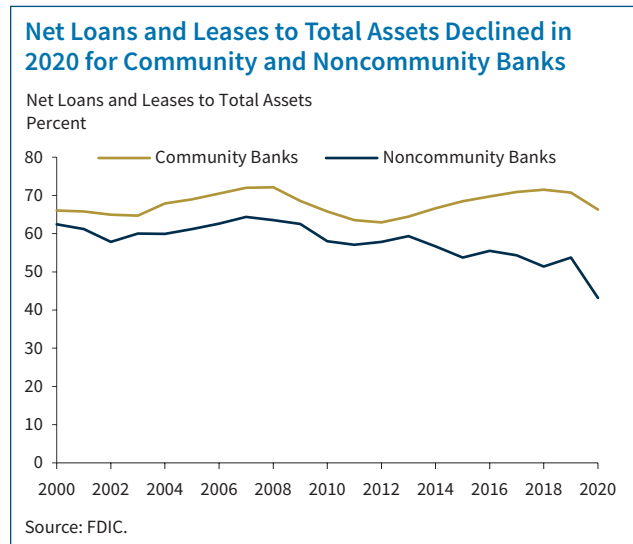
quarter 2020, PPP loan balances declined \$83 billion (17.1 percent) as some PPP loans were forgiven. The fee income that was generated more than offset the loss of the low-yielding repaid PPP loans.

**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

Chart 52



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

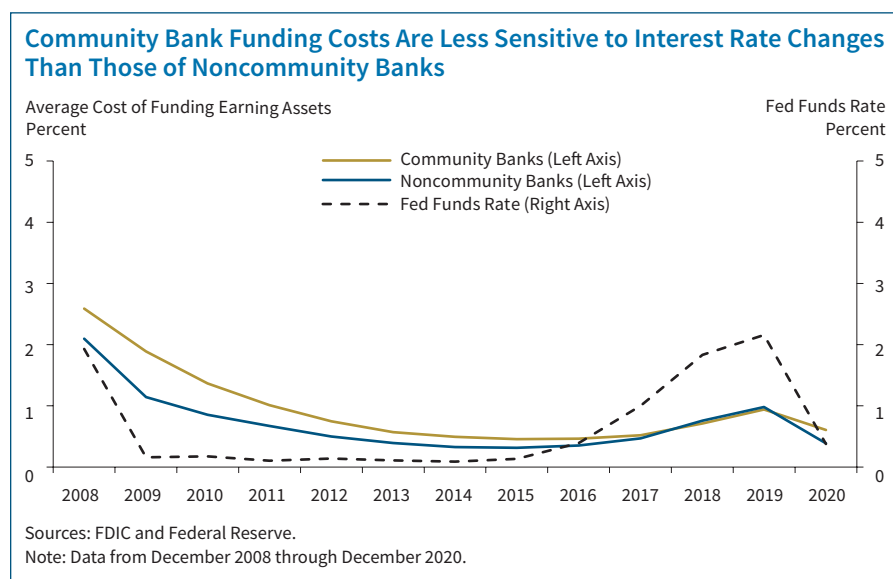
banks. A larger proportion of loans to assets and a greater volume of higher-yielding commercial real estate loans to total loans support community bank NIMs during periods of low interest rates but may limit community bank options to maintain profitability during a prolonged period of low interest rates 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.<sup>86</sup>

**Chart 53**



<sup>86</sup> Federal Open Market Committee, Summary of Economic Projections, December 2020.

## 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.<sup>87</sup>
- Weak loan growth in 2020 contributed to improved liquidity among community banks.

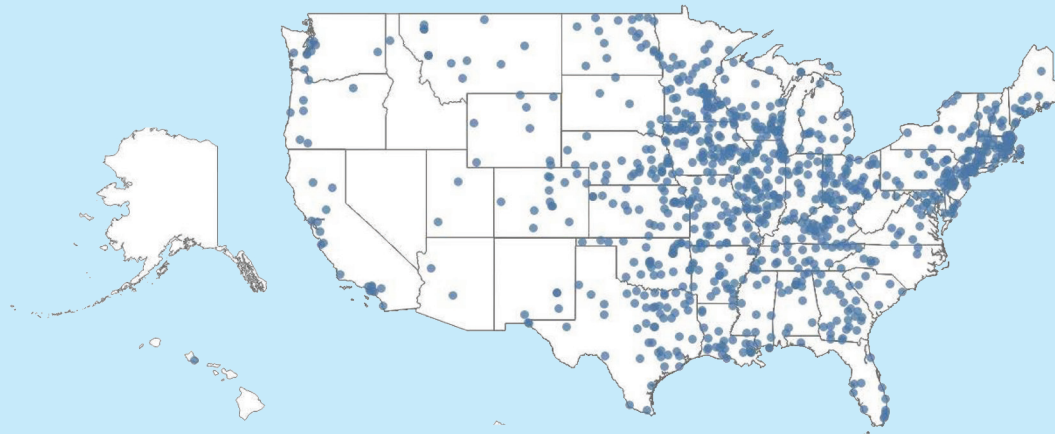
Liquidity represents a financial institution's ability to fund assets and meet obligations as they become due. Maintaining adequate liquidity is an essential part of banking. Liquidity is required to fulfill depositor withdrawals, make advances on existing lines of credit, and fund new loans. Financial 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.

<sup>87</sup> 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.

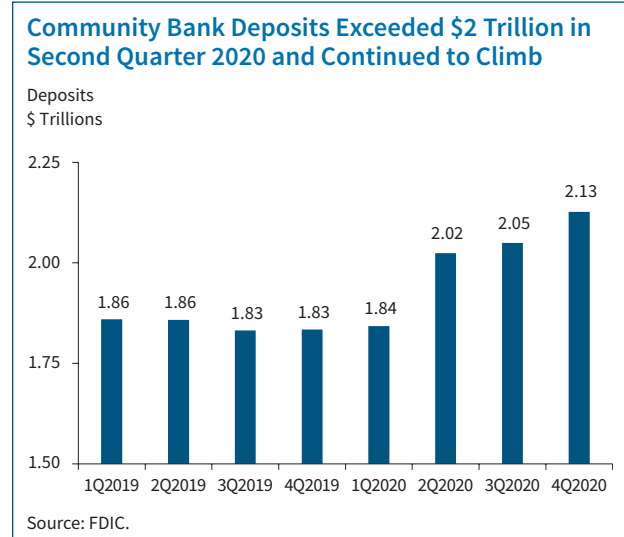
**Deposits surged during the pandemic as consumers and businesses responded to uncertainty by stockpiling cash.** Coinciding with the economic uncertainty caused by the pandemic, many banks experienced an unprecedented influx of deposits. In aggregate, bank deposits grew by \$3.3 trillion, or 22.6 percent, 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

**Chart 54**



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.<sup>88</sup> 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).<sup>89</sup>

**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.

Chart 55

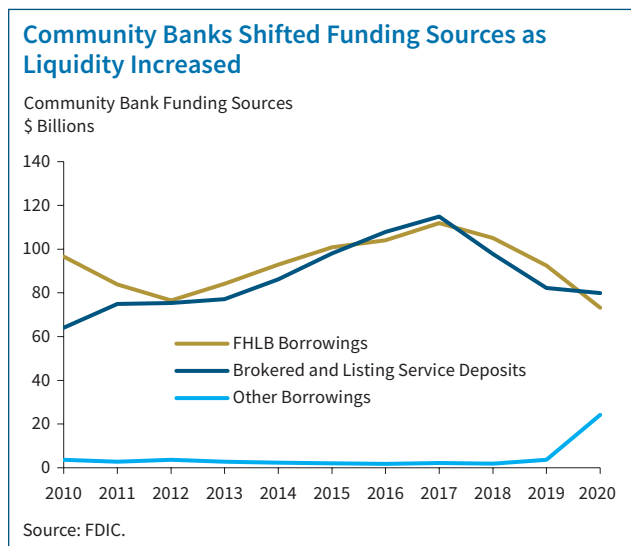
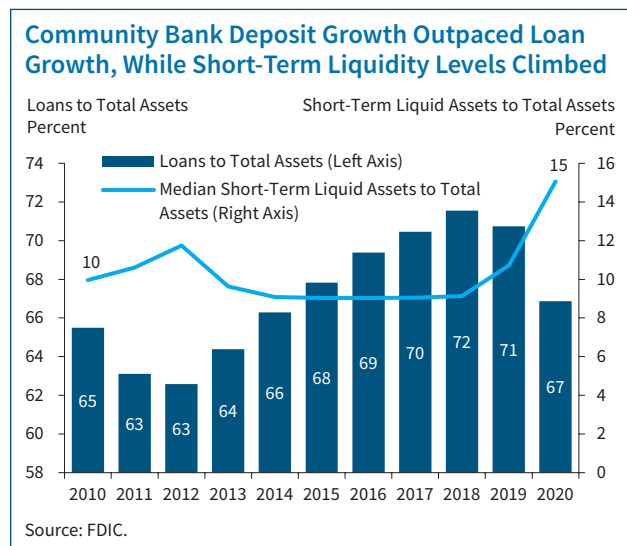


Chart 56



<sup>88</sup> 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.

<sup>89</sup> 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.