# ZAIS Insights

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# Banks are in better shape to weather the Corona fallout

## Banks are in better shape to weather the Corona Fallout

- Banks reduced balance sheet risk and leverage, and raised capital buffers, while retaining profitability
- Housing market resilience also supports banks' financial position
- Banks expected to perform better under stress than during the financial crisis

Bank credit spreads have, so far, moved in parallel with corporate credit spreads during the Corona crisis (see Chart 1). This is probably due to the overwhelming force of Fed asset purchases, which blurs the differences in credit fundamentals.

We do not expect another total shutdown, yet we worry that the economic fallout from the Corona crisis is far from over. The Fed may be able to prevent a financial meltdown, but liquidity is not the perfect solution for solvency problems. Indeed, we fear that more testing times may lie ahead for credit markets.

How will bank credit-spreads perform if stress returns to the system? In the dot-com crisis, the corporate sector was the trouble spot and underperformed, while banks were the problem in the financial crisis and underperformed (see Chart 1).

This time, neither banks nor corporates are the cause of the crisis and perhaps Fed liquidity will continue to prevent a credit-market meltdown. In any event, we believe banks are in better shape to withstand the economic fallout from the Corona crisis than they were during the financial crisis.

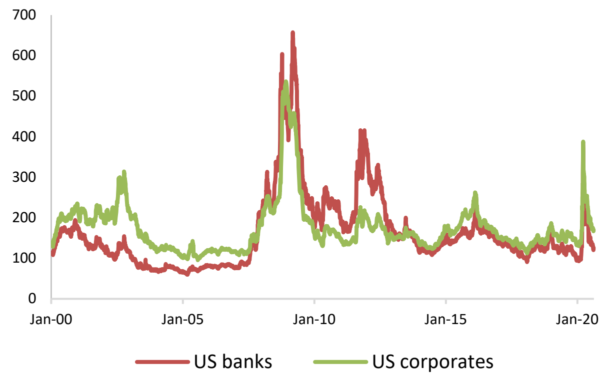
## Bank balance sheets are much stronger

The main reason for our confidence in the banking sector is the strengthening of banks' balance sheets (see Table).

- The share of risky assets, especially risky property loans like revolving home equity loans, has been reduced.
- Cash and interest-bearing balances at the Fed plus Treasury and Agency securities account for 35% of total assets.
- On the funding side, higher-interest-bearing borrowings have been reduced, while deposits at lower or zero interest rates have been increased and the loan/deposit ratio has dropped from over 100% to just 60%.
- The share of other assets and liabilities, which include trading and derivative activities, has declined.
- Finally, the share of equity has nearly tripled over the last 20 years.

### Chart 1: US high-grade credit spreads

Basis points over Treasuries




Source: JPMorgan[1]

### Balance sheet items of large US banks

% of total assets

| | Dot-com crisis | Financial crisis | Corona crisis |
|---|---|---|---|
| Total loans | 59.8 | 58.7 | 49.0 |
| Commercial & industrial loans | 15.6 | 11.9 | 12.7 |
| Commercial real estate loans | 9.9 | 10.4 | 6.4 |
| Residential real estate loans | 16.4 | 22.8 | 12.4 |
| Revolving home equity loans | 2.4 | 6.0 | 1.6 |
| Consumer loans | 11.4 | 9.0 | 9.6 |
| Securities | 17.6 | 18.4 | 24.5 |
| Treasuries & Agencies | 11.8 | 10.7 | 20.4 |
| Cash & Fed balances | 4.9 | 3.0 | 14.6 |
| Loans to other banks | 2.3 | 1.1 | +0.0 |
| Other assets | 15.3 | 18.7 | 11.9 |
| Deposits | 61.3 | 56.9 | 80.7 |
| *Loans % of deposits* | *97.5* | *103.2* | *60.7* |
| Debt borrowings | 18.7 | 17.9 | 5.6 |
| Other liabilities | 15.9 | 18.7 | 2.4 |
| Equity | 4.0 | 6.5 | 11.3 |
| *Debt % of equity* | *467.5* | *275.4* | *49.6* |

Source: Board of governors of the Federal Reserve System[2]

## Yet bank earnings are not much lower

The reduction in risk-taking and leverage – the Table shows the debt/equity ratio dropped nearly tenfold over the last 20 years – has happened in an environment of falling net interest margins. Yet the return on assets has recovered to levels not much lower than before the financial crisis (see Chart 2). The return on equity did not recover to the highs of the 1990s and early 2000s, but that is no surprise given the much higher capital ratios.

Importantly, there were no signs of fatigue before the Corona crisis. The average return on equity averaged a bit over 10% in both 2018 and 2019, the highest levels since the period before the financial crisis.[3]

## Banks are preparing for large loan losses

The lockdown forced banks to close branches and many employees worked from home, but banking activity did not drop like overall economic activity. The four largest US commercial banks, which account together for more than 40% of banking assets, reported on balance flat revenues in the second quarter relative to a year ago.[4]

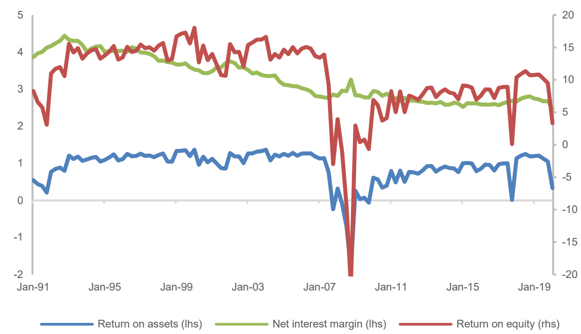
Earnings, however, fell as banks raised their loan loss reserves. In the first quarter, loan-loss reserves rose from 1.2% to 1.8% of total loans (see Chart 3) and we estimate based on individual bank reports that overall loan-loss reserves rose to 2.5% in the second quarter. We believe banks will continue to provision in the second half with loan-loss reserves coming close to 4% of total loans at the end of the year – similar to the peak during the financial crisis and worth about $400 billion.

## Yet Fed expects banks to remain strong

The Fed's recent stress test projects for the worst-case Corona scenarios total loan losses of up to $700 billion.[5] Capital ratios are set to decline under these scenarios, but the Fed expects most banks to remain well capitalized and only a few banks to approach minimum capital levels.

### Chart 2: US bank returns and margins

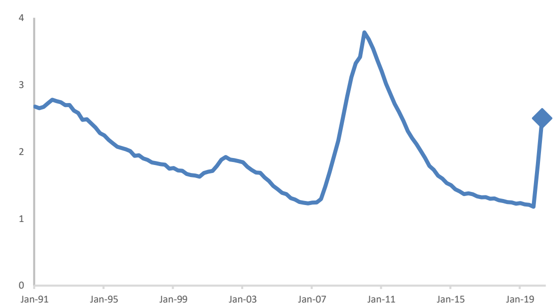
Percent




Source: Federal Reserve Bank of New York[6]

### Chart 3: US bank loan-loss reserves

Percent of total loans



Source: Federal Reserve Bank of New York[7]

The crisis is not over and conditions could deteriorate again, but the Fed's worst-case scenarios have so far not materialized. Especially on the financial side, the Fed's worst-case scenarios are much darker, such as a 50% decline in equity prices until year end, a 25% drop in house prices and a sustained widening of BBB credit spreads to over 500 basis points.[8]

## Housing market resilience helps banks

On the housing side, the share of mortgage loans in forbearance has surged above 8%, but is already declining (see Chart 4). Meanwhile, mortgage purchase applications have bounced back strongly after an initial dip in March and April.

We believe that the housing sector is overall in good shape without building excesses as before the financial crisis, and with lower household-debt-income ratios and more high-quality borrowers.[9] Indeed, the employment situation of the main constituency of home buyers, namely people 25 years or older with a bachelor degree or higher, has been least negatively impacted by the Corona crisis (see Chart 5).

Thus, we expect that resilient house prices will protect banks from larger losses even as defaults increase. So far, house prices have held up well and households expect house prices to continue to rise according to the latest survey by the NY Fed.[10]

## Banks are less exposed to corporates

In our view, corporate defaults are likely to hurt the banking sector more than housing-related defaults. Still, we think the banking sector is in a position to withstand such stress.

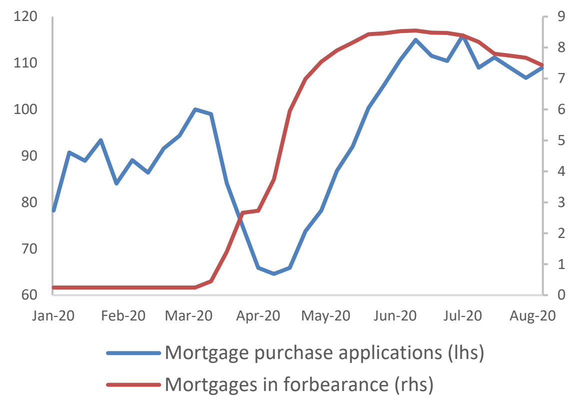
First, the share of industrial and commercial as well as commercial real estate loans in banks' balance sheets is lower (see Table again) and bank loans also make up just about 13% of total corporate debt.[11]

Second, banks have much stronger means to absorb default shocks from the corporate sector thanks to more resilient earnings and high reserves and capital endowments.

Finally, we believe that banks remain systemically important from a policy perspective and think banks are likely to receive blanket fiscal and monetary support if stress threatens the functioning of the financial system.

### Chart 4: US mortgage loans

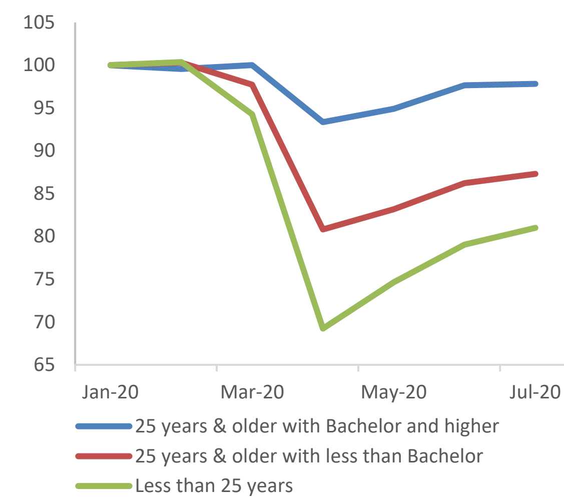
Index 03/06/2020=100 (lhs) & % of loans (rhs)




Source: Mortgage Bankers Association[12]

### Chart 5: US employment situation

Index Jan-2020 = 100




Source: St. Louis Federal Reserve[13]

## More information

As always, we are available to discuss our views with you. Please contact your Client Relations representative at +1 732 978 9722 or zais.clientrelations@zaisgroup.com

[1] JPMorgan JULI Credit Market Index. https://markets.jpmorgan.com/#dataquery

[2] Board of Governors of the Federal Reserve System; Assets and Liabilities of Commercial Banks in the United States - H.8. The data points are March 2001 for the dot-com crisis, December 2007 for the financial crisis and June 2020 for the current crisis. https://www.federalreserve.gov/releases/h8/current/

[3] Federal Reserve Bank of New York - Research and Statistics Group; Quarterly Trends for Consolidated U.S. Banking Organizations – Q2 2020; https://www.newyorkfed.org/research/banking_research/quarterly_trends.html

[4]JPMorgan: https://www.jpmorganchase.com/corporate/investor-relations/document/b766e467-5bf6-4da0-8eae-1fbd8b1810b0.pdf

Bank of America: http://investor.bankofamerica.com/static-files/d70d6be8-5738-443c-8db7-6fbbb0d6e51b

https://www.citigroup.com/citi/investor/data/p200714a.pdf?ieNocache=359

Citi: https://www.citigroup.com/citi/investor/data/p200714a.pdf?ieNocache=359

Wells Fargo: https://www08.wellsfargomedia.com/assets/pdf/about/investor-relations/earnings/second-quarter-2020-earnings-supplement.pdf

[5]https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200625c.htm

[6] Same as footnote 3.

[7] Same as footnote 3. Last observation for 2020-Q2 is ZAIS estimate.

[8] Same as footnote 5.

[9] Single-home permits are about half the level as before the financial crisis (U.S. Census Bureau and U.S. Department of Housing and Urban Development, New Private Housing Units Authorized by Building Permits - in Structures with 1 Unit [PERMIT1], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/PERMIT1, August 2, 2020).

The household debt-income ratio has dropped from 134% before the financial crisis to 97% in the first quarter of this year (Board of Governors of the Federal Reserve System (US), Households and Nonprofit Organizations; Debt Securities and Loans; Liability, Level [TCMILBSHNO], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/TCMILBSHNO, July 18, 2020. U.S. Bureau of Economic Analysis, Disposable Personal Income [DPI], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/DPI, August 2, 2020.

Top-rated mortgages (credit score of 760+) account for roughly 2/3 of all new mortgages. Federal Reserve Bank of New York - Research and Statistics Group; Quarterly Report on Household Debt and Credit – Q1 2020. https://www.newyorkfed.org/medialibrary/interactives/householdcredit/data/pdf/HHDC_2020Q1.pdf

[10] S&P Dow Jones Indices LLC, S&P/Case-Shiller U.S. National Home Price Index [CSUSHPISA], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/CSUSHPISA, August 8, 2020.

Home Price Change Expectations; SURVEY OF CONSUMER EXPECTATIONS (AUG 2020); https://www.newyorkfed.org/microeconomics/sce#indicators/inflation-expectations/g3

[11] Board of Governors of the Federal Reserve System (US), Nonfinancial Corporate Business; Debt Securities and Loans; Liability, Level [BCNSDODNS], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/BCNSDODNS, July 18, 2020.

U.S. Bureau of Economic Analysis, Net value added of nonfinancial corporate business: Net operating surplus [W326RC1Q027SBEA], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/W326RC1Q027SBEA, July 21, 2020.

U.S. Bureau of Economic Analysis, Gross value added of nonfinancial corporate business [A455RC1Q027SBEA], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/A455RC1Q027SBEA, July 24, 2020.

[12] https://www.mba.org/news-research-and-resources/research-and-economics/single-family-research/weekly-applications-survey

https://www.mba.org/news-research-and-resources/newsroom

[13] U.S. Bureau of Labor Statistics, Employment Level [CE16OV], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/CE16OV, August 16, 2020.

U.S. Bureau of Labor Statistics, Employment Level - Bachelor's Degree and Higher, 25 Yrs. & Over [LNS12027662], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/LNS12027662, August 16, 2020.

U.S. Bureau of Labor Statistics, Employment Level - 25-54 Yrs. [LNS12000060], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/LNS12000060, August 16, 2020.

U.S. Bureau of Labor Statistics, Employment Level - 55 Yrs. & Over [LNS12024230], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/LNS12024230, August 16, 2020.

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