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US Bank Market Report 2023

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Sharp rate increases and risk management shortfalls at a few institutions sparked a liquidity crunch for the US banking industry in the early spring of 2023, putting the value of deposit franchises back to the forefront. The episode will cause net interest margins to come under pressure in the near term and could lead to regulatory changes for regional banks, as well as even greater focus on all banks' deposit composition and sources of liquidity.

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Executive Summary

Introduction

Significant tightening from the Federal Reserve since March 2022 and customers moving cash out of banks into higher-yielding alternatives have put pressure on liquidity across the banking industry. More recently in the late spring of March 2023, some institutions with exposure to the venture capital and technology space have seen their customers experience even higher cash burns, resulting in greater liquidity pressures. In the case of Silicon Valley Bank and Signature Bank, those pressures manifested in bank runs that culminated in those banks' failures in March.

The shifts in deposits will cause funding costs to rise significantly, particularly in the first half of 2023 as the fallout from the second- and third-largest bank failures in US history has sparked concerns over the entire banking industry's funding. The increased funding costs will serve as a headwind to banks' net interest margins. As margins come under pressure, banks will continue to build reserves for loan losses in the face of an increasingly uncertain economic environment. The margin compression and reserve builds will put pressure on bank earnings, which should fall notably from 2022 levels.

About the US Bank Market Report

In this report, S&P Global Market Intelligence examines the Federal Reserve's efforts to tame elevated inflation with aggressive tightening of monetary policy and the impact those actions have had on the banking industry's liquidity, profitability and credit quality. We acknowledge the likelihood of market-changing events occurring over a five-year period but have created projections for 2023 through 2027 based in part on IHS Markit economists' expectations for interest rates, unemployment and economic growth. Projections are based on management commentary, discussions with industry sources, regression analysis, and asset and liability repricing data disclosed in banks' quarterly call reports. While taking into consideration historical growth rates, Market Intelligence has often excluded from this report's analysis the significant volatility experienced in 2007 to 2009 during the great financial crisis.

Key Findings

- US bank earnings are expected to fall 18.3% in 2023 as deposit outflows and notably higher deposit costs weigh on net interest margins.
- Higher interest rates have boosted loan yields but have also led to growing pressures on bank liquidity. Funding costs will rise at a quicker pace than earning-asset yields in 2023, causing net interest margins to contract by 10 basis points in 2023 and another 7 basis points in 2024.
- Deposit betas, or the percentage of rate changes banks pass on to customers, will more than double in 2023 from year-ago levels.

The Take

Swift rate increases and a liquidity crisis at a handful of banks, including several major failures and shutdowns late in the first quarter of 2023, have placed a far greater premium on deposits at US banks. The search for deposits will cause already increasing deposit costs to accelerate at a quicker pace in the first half of 2023. Banks will also respond to the liquidity crunch by building reserves for loan losses, slowing loan growth and building cash on their balance sheets. Those actions in conjunction with higher funding costs will put pressure on margins and earnings.

Bank industry aggregate profitability metrics (%)

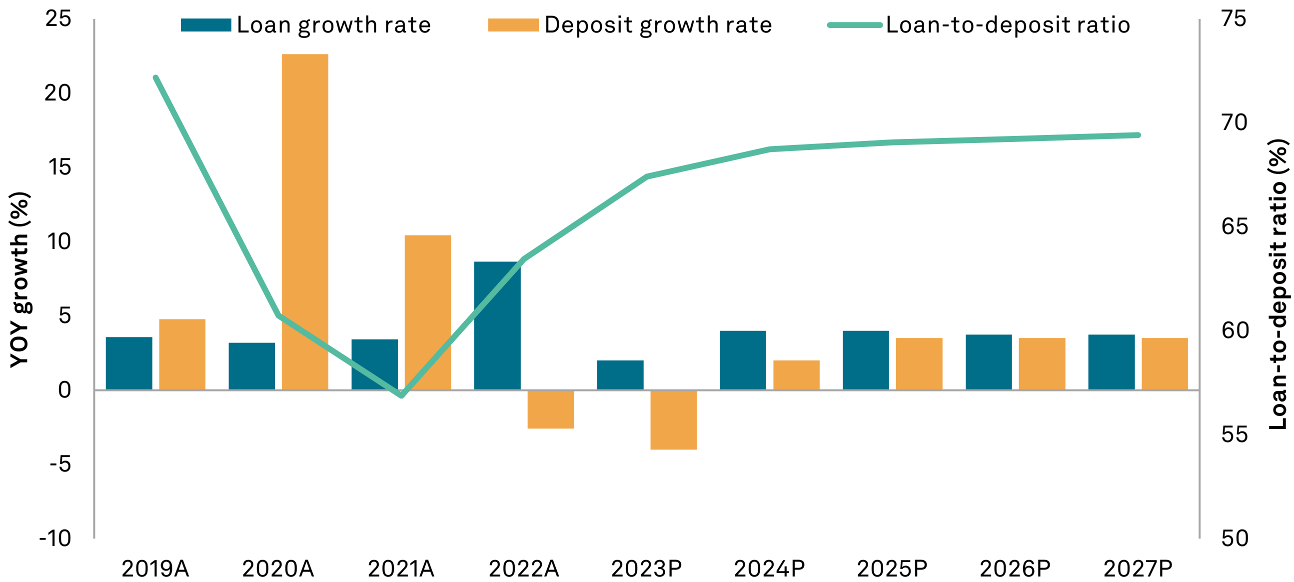
	2022A	2023P	2024P	2025P	2026P	2027P
Efficiency ratio	57.68	59.51	60.84	59.75	59.06	57.93
Net interest margin	2.87	2.77	2.70	2.76	2.81	2.91
ROAA	1.11	0.90	0.96	1.01	1.03	1.12
ROAE	11.96	9.49	10.03	10.53	10.64	11.38
YOY earnings growth	-6.03	-18.32	9.68	9.42	5.42	11.74

Data compiled April 5, 2023.
A = actual; P = projected.
Sources: S&P Global Market Intelligence; proprietary estimates.

Liquidity crunch put funding in focus

Significant increases in interest rates led to considerable margin expansion at US banks in 2022 as loan yields jumped, while funding costs only rose modestly through the first nine months of the year. The environment began to change in the fourth quarter, when more customers moved their funds out of banks in search of higher rates in the Treasury and money markets. Those deposit outflows continued in the first quarter, leading to even greater liquidity pressures across the industry.

Liquidity crunch will pressure deposits in the short term (%)



Data compiled April 5, 2023.
A = actual; P = projected.
Source: S&P Global Market Intelligence.

Investors and even regulators feared that some banks might need to sell bonds in response to the deposit outflows to meet customers' demands for cash. Those fears were realized when SVB Financial announced March 8 that it sold its available-for-sale portfolio at an after-tax loss of $1.8 billion. The company hoped that the move and related plans to raise capital would stem investor concerns, but ultimately the opposite occurred as depositors flocked from the bank, pulling $42 billion in deposits the following day.

The modern-day bank run resulted in the failure of SVB unit Silicon Valley Bank on March 10. As unease spread across the marketplace, Signature Bank experienced a bank run as well, reportedly losing 20% of its deposits in a single day. The New York Department of Financial Services took possession of New York-based Signature Bank on March 12.

Silicon Valley and Signature had higher levels of uninsured deposits — meaning deposits greater than $250,000 and not covered by Federal Deposit Insurance Corp. deposit insurance — than other institutions, with those funds representing 93.8% and

Top US banks by proportion of uninsured deposits

Limited to top 15 US banks at Dec. 31, 2022

Ranked by call report data

Company (top-level ticker)	Total assets ($B)	Uninsured deposits[1] — Call report data before exclusions, public filings data ($B)	Uninsured deposits[1] — Proportion of total deposits after exclusions (%)[2]	Preferred deposits ($B)[3]	Loans + HTM securities/ total deposits (%)[4]	AOCI ($B)	AOCI Proportion of total capital (%)	Tangible equity ratio (%)
● Silicon Valley Bank	209.0	151.6	93.8	0.0	94.4	-1.9	10.6	7.27
Bank of New York Mellon (BK)	324.6	175.1/156.6	92.0/82.3	0.7	31.2	-4.4	21.5	6.24
State Street Bank and Trust Co. (STT)	298.0	148.9	91.2	0.0	40.1	-3.4	18.1	6.16
● Signature Bank	110.4	79.5	89.3	1.4	93.3	-2.0	18.1	7.26
Northern Trust Co. (NTRS)	154.5	41.9	81.6	0.0	54.5	-1.5	13.0	6.62
Citibank NA (C)	1,766.8	598.2	73.7	2.0	64.6	-29.9	18.1	8.62
CIBC Bank USA (CM)	50.9	30.0	73.1	0.1	87.1	-0.3	4.5	11.19
HSBC Bank USA NA (HSBA)	162.4	94.2/86.9	70.6/65.2	0.1	47.4	-2.6	12.8	9.52
City National Bank (RY)	96.5	53.1	70.3	0.3	93.6	-1.6	17.3	6.65
First Republic Bank (FRC)	212.6	119.5	67.4	0.6	110.6	-0.3	1.7	8.11
East West Bank (EWBC)	64.1	35.1/26.8	65.8/50.2	3.9	91.1	-0.8	11.3	8.52
BMO Harris Bank NA (BMO)[5]	177.0	88.6	60.5	3.0	72.7	-3.5	16.9	8.87
Comerica Bank (CMA)	85.5	45.5	60.4	0.1	72.8	-3.7	40.7	4.85
Western Alliance Bank (WAL)	67.7	31.1/29.5	56.3/53.4	0.4	101.7	-0.7	10.6	7.52
Frost Bank (CFR)	53.0	23.8	53.6	1.5	44.6	-1.3	33.5	4.60
Banking industry aggregate	**23,599.4**	**7.9**	**45.9**	**570.3**	**78.2**	**-326.1**	**14.8**	**7.85**

● Failed companies

Data compiled March 16, 2023.
AOCI = accumulated other comprehensive income.
Tangible equity ratio = tangible equity divided by tangible assets.
Analysis includes US commercial banks, savings banks, and savings and loan associations that reported at least $50 billion in total assets at Dec. 31, 2022. Foreign banking organizations are excluded.

[1] Uninsured deposits are the bank's estimated value of deposits held in domestic US offices not covered by federal deposit insurance, as reported in call report filings at the subsidiary level. Data may include internal company deposits, collateralized deposits that are backed with securities and other deposits structured to qualify for insurance or other collateralization, and may be higher, sometimes significantly so, from GAAP filings at the parent-company level. GAAP data is sourced from parent-company public filings for the year ended Dec. 31, 2022, and may exclude items like intercompany deposits and municipal deposits backed with pledged securities, however, disclosures vary. GAAP data is collected on a best-efforts basis and is shown where it is materially different from subsidiary level data reported in call report filings. Not all companies had enough granular data in GAAP filings to make adjustments.

[2] Total deposits are calculated as total deposit liabilities before exclusions minus total allowable exclusions as reported in Schedule RC-O in in call report filings at the subsidiary level.

[3] All deposits of states and political subdivisions in the US, including transaction and nontransaction accounts which are secured or collateralized as required under state law.

[4] Total loans and leases, including held-for-investment and held-for-sale, plus held-to-maturity securities shown at cost basis divided by total deposits, including foreign and domestic deposits.

[5] BMO Harris Bank NA acquired Bank of the West on Feb. 1, 2023.

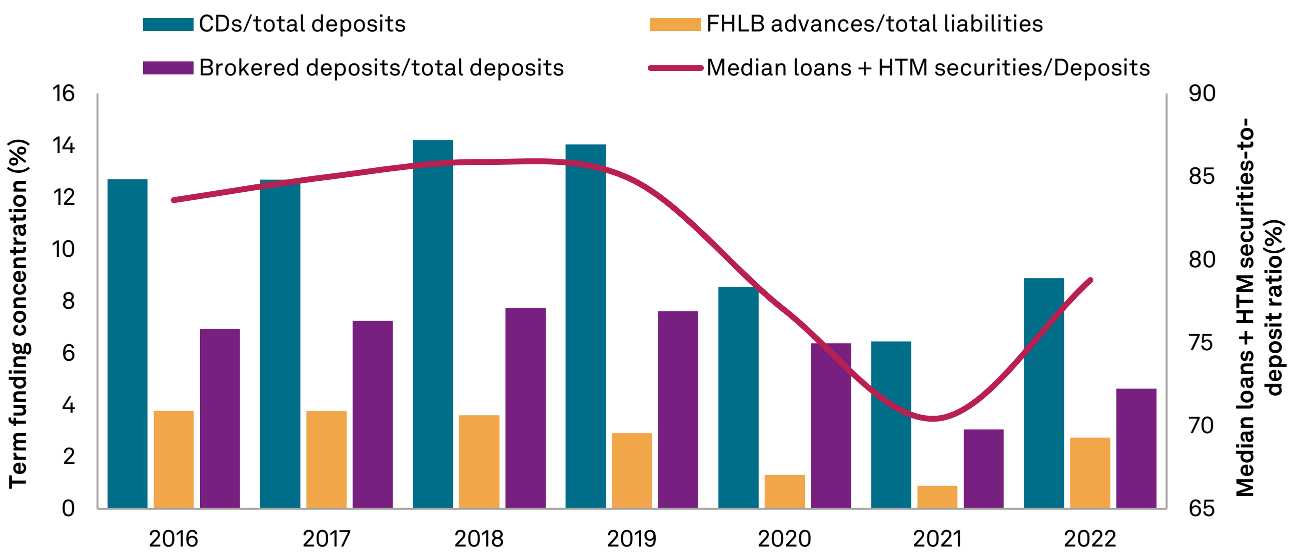
Data based on regulatory call report filings as of Dec. 31, 2022, unless otherwise noted.
Top-level tickers are for the ultimate parent company's home-country stock exchange.
Source: S&P Global Market Intelligence.

89.3% of deposits, respectively, at year-end 2022. Uninsured deposits represented 45.9% of deposits for the banking industry aggregate. If an institution has a higher concentration of large deposits, it is arguably easier for cash to leave the bank quickly, since fewer customers have to take action.

The investment community has also examined the ratio of loans plus held-to-maturity securities-to-deposits at a given bank to see how many deposits are tied up in less liquid assets. Silicon Valley's ratio of loans plus held-to-maturity (HTM) securities/total deposits was 94.4% at year-end 2022, while Signature's ratio stood at 93.3% compared to 78.2% for the banking industry in aggregate.

A few other institutions like First Republic Bank that had an elevated level of uninsured deposits and a high loans plus HTM securities/deposit ratio reported notable outflows as well.

Banks increase wholesale funding reliance as liquidity pressures grow



Data compiled March 30, 2023.
CD= certificate of deposit; FHLB = Federal Home Loan Bank; HTM= Held to maturity.
Source: S&P Global Market Intelligence.

Most banks, though, say that their deposit balances have held fairly steady even in the face of liquidity fears that have emerged in the market. A number of regional banks have reported that depositors remain confident in their institutions, and community banks say they have not only avoided significant outflows but have reported deposit inflows into their institutions. That is good news for the industry, which would also incur some pain if it needed to sell underwater bonds for liquidity needs.

The Federal Reserve's H.8 data, which tracks commercial bank balances on a weekly basis, shows that deposits continued to decline in the first quarter, falling 2.8% through the week ended March 22. In the two weeks after Silicon Valley experienced a bank run, deposits at US commercial banks fell by $300.17 billion. Meanwhile, the Fed data shows considerable growth in time deposits across the industry. Higher-cost funds like certificates of deposit (CDs) and borrowings likely will become even larger portions of banks' deposit base, while noninterest-bearing deposits decline.

Banks' emergency borrowing from the Fed also seems to have stabilized. Direct borrowing from the Fed's discount window and the recently created Bank Term Funding Program has been roughly stable for the two weeks through March 29 after an initial spike to $164.80 billion on March 15.

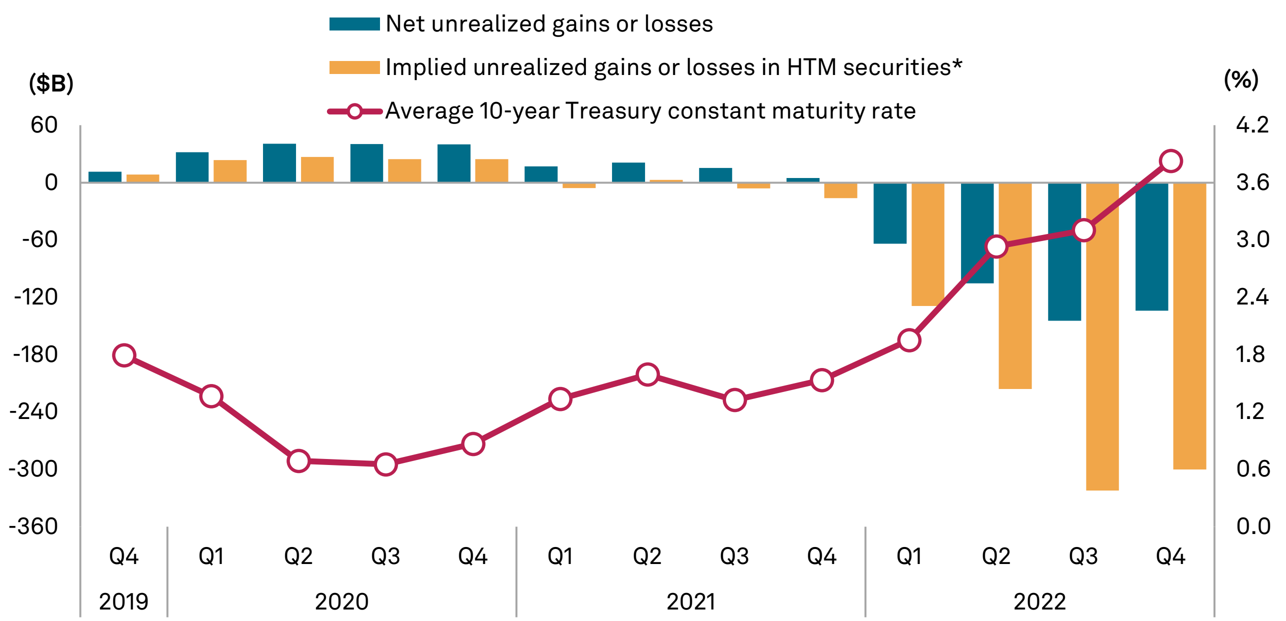
Underwater bond portfolios heighten liquidity pressures

Bank bond portfolios remained well underwater through year-end 2022. Unrealized losses in banks' available-for-sale (AFS) securities portfolios, which continue to hold the majority of bonds that most banks own and must be marked to market on a quarterly basis, remained quite large at the end of the fourth quarter. In the fourth quarter, institutions including US commercial banks, savings banks, and savings and loan associations that file GAAP financials reported $134.10 billion in unrealized losses in their AFS portfolios, compared to $144.53 billion in unrealized losses in the prior quarter.

Unrealized losses in AFS portfolios are captured in accumulated other comprehensive income (AOCI). While AOCI does not impact bank earnings, it does impact tangible common equity and has depressed the capital metric considerably.

Banks' HTM portfolios, which are not marked to market on a quarterly basis, had even larger unrealized losses at year-end 2022. Some banks, particularly the nation's largest institutions, have sought to protect large portions of their securities portfolios from swings in the market by placing bonds in HTM portfolios. For banks with over $700 billion in assets, changes in AOCI would impact regulatory capital in addition to tangible book value.

Net unrealized gains or losses at US public banks



Data compiled March 20, 2023.
HTM = held-to-maturity.
Analysis based on operating and historical US public banks.
Net unrealized gains or losses based on GAAP filings.
* Data based on regulatory filings and represents the unrealized gains or losses on HTM securities by calculating the difference between the securities' fair value and amortized cost.
Source: S&P Global Market Intelligence.

Large banks classified as US global systemically important banks (G-SIBs) — those with more than $700 billion in assets — have placed 69% of their bond portfolios in held-to-maturity portfolios. That is down slightly from 70% in the third quarter and up from about 31% three years ago.

Unrealized losses in HTM portfolios totaled $300.15 billion in the fourth quarter of 2022, down slightly from $322.20 billion in the prior quarter.

Somewhat ironically, the intense focus on bank liquidity might offer a lift to values of bank bond portfolios in the first quarter. The liquidity crunch in the banking sector has led to a flight to quality in the bond market. Accordingly, the pressure on bank bond portfolios likely will ease in the first quarter, with intermediate and long-term rates falling notably since the end of the fourth quarter.

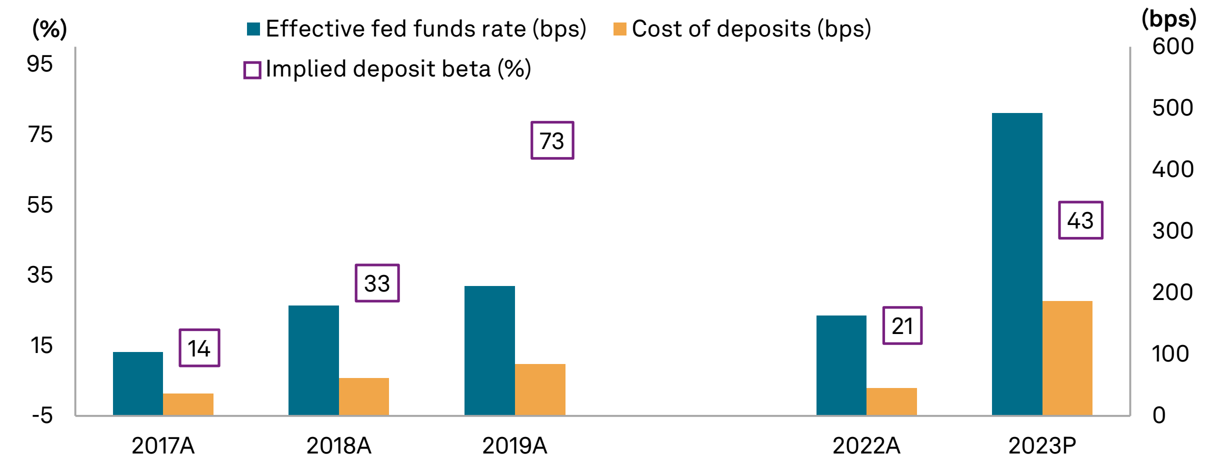
Some investors have begun applying the unrealized loss embedded in banks' HTM portfolios to tangible book value to determine the companies' adjusted, burn-down values. They believe that institutions still trading below historical price-to-tangible book values, on an adjusted basis, could screen relatively cheap and offer some protection against the turmoil in the market, which has wreaked havoc on many bank stocks.

Deposits once again the true value of banks

Since a considerable portion of deposits are tied up in less liquid assets, including those that are deeply underwater, many banks' liquidity is stretched. That dynamic contributed to funding costs rising more notably in the fourth quarter.

The banking industry recorded a quarter-over-quarter interest-bearing deposit beta — the percentage of change in fed funds passed on to depositors holding interest-bearing accounts — of 44.6% in the fourth quarter, up from 32.8% in the third quarter and 17.7% in the second quarter. The industry recorded a beta on all deposits, including non-interest-bearing funds, of 20.7%, nearly in line with the 22% projected in our outlook in mid-December.

Deposit betas to jump in 2023



Data compiled April 5, 2023.
Figures for the federal funds rate through 2023 are based on a 4-quarter average of estimates provided by IHS Markit. Actual reported figures used when available.
Sources: S&P Global Market Intelligence; IHS Markit; proprietary estimates.

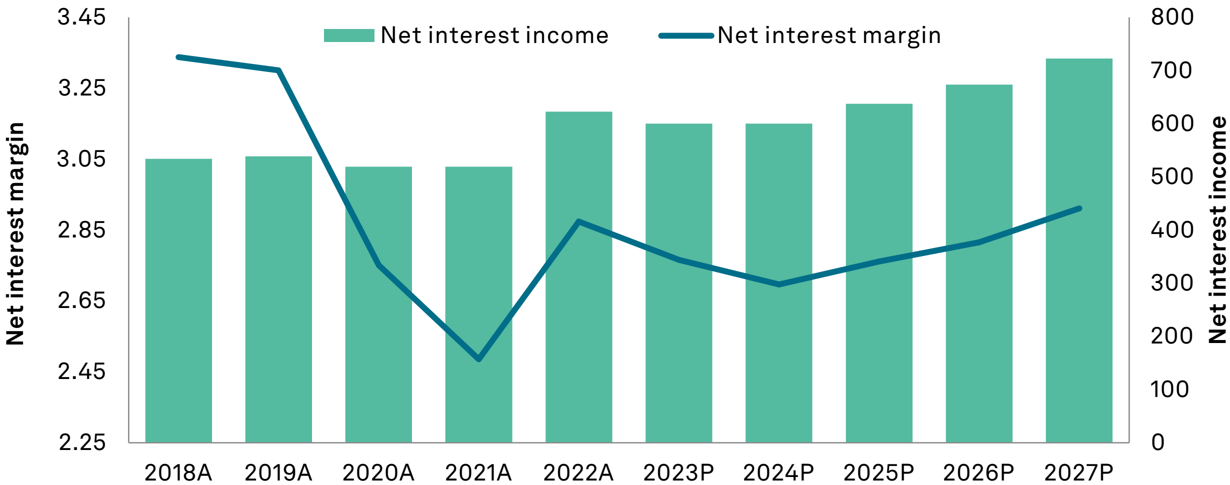
The pressure was even greater in the first quarter as deposit outflows accelerated due to the liquidity crunch at a few institutions. Banks will defend their deposits to an even greater degree by marketing deposits with higher rates.

As institutions come closer to their own internal ceilings for their loan-to-deposit ratios, they will become increasingly hungry for new funding and many will turn to CDs, borrowings and brokered deposits to satisfy their appetite, leading to higher deposit betas.

For full-year 2023, we project betas to reach 43%, up significantly from our mid-December projection of 32% due to liquidity pressures in the market.

The higher deposit beta will put pressure on bank margins even as earning-asset yields continue to rise. We project net interest margins to contract 10 basis points in 2023 and then fall another 7 basis points in 2024. Economists expect modest declines in interest rates in 2024, which will pressure earning-asset yields, but funding costs should continue to grind higher as depositors continue to move funds out of non-interest-bearing deposits and into higher-cost offerings like CDs.

Liquidity pressures will stall net interest margin expansion (%)



Data compiled April 5, 2023.
A = actual; P = projected.
Source: S&P Global Market Intelligence.

Credit quality slipping from pristine levels

Credit costs remain historically low for the banking industry and institutions continue to see minimal stress in their borrowing base. However, borrowers will begin to feel the impact of substantially higher rates and elevated inflation, leading to a normalization of credit trends.

Credit trends remain benign as the unemployment rate stands near historical lows, US household-to-debt to income stands 1.3 percentage points below the 40-year average and early warning indicators, such as criticized loans, are quite low.

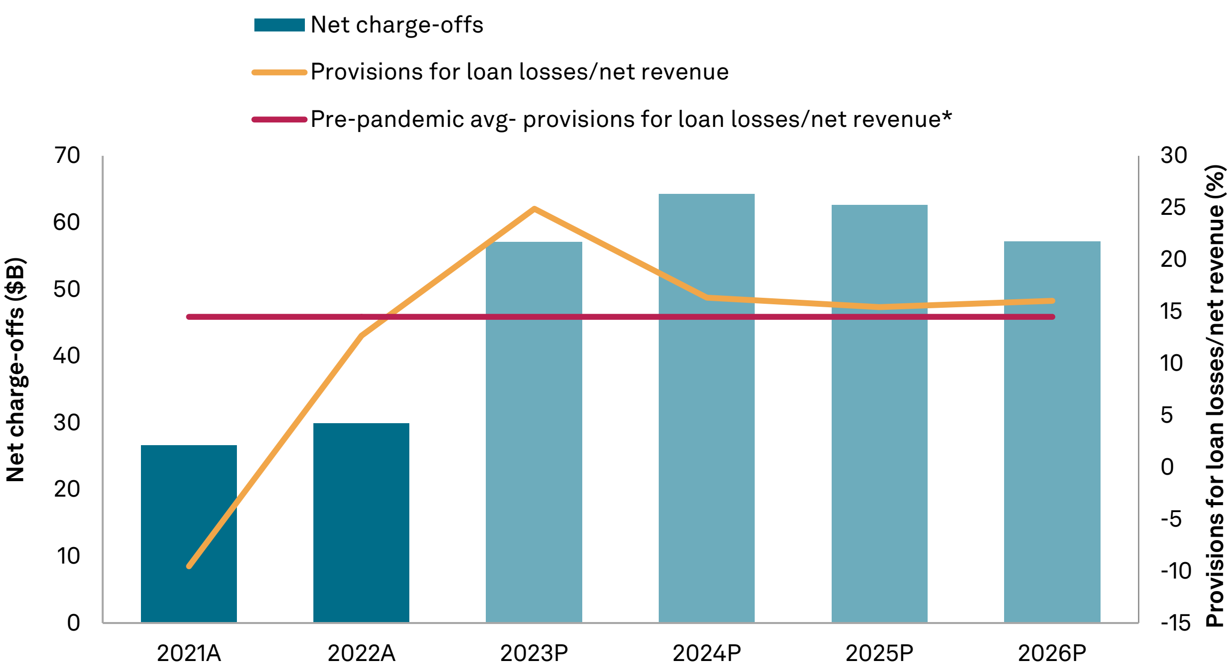
Still, there are signs of weakness in the market, with an inverted yield curve, which is often a precursor of a recession. Higher mortgage rates have slowed transaction activity in the housing market, where the inventory of homes for sale stands at 8.2 months of supply at the current sales rate, compared to the 40-year average of 6.0 months of supply.

US consumers have maintained spending but have largely done so by borrowing more while working through excess savings accumulated during the pandemic. Bank lending has also slowed in the aftermath of the liquidity crunch, and if credit becomes harder to access or unavailable for some challenged borrowers such as office landlords, they might find it difficult to secure financing elsewhere.

Most bankers seem to expect a slowdown soon. More than two-thirds of bank and credit union executives surveyed by S&P Global Market Intelligence late in 2022 said they expected the US economy to be in recession within the next nine months. The group also expected net charge-offs to rise significantly by year-end 2023, albeit off low levels.

Both JPMorgan Chase & Co. and Bank of America Corp. said during fourth-quarter 2022 earnings season that they expect a mild recession to occur in 2023, and conditions have not improved since then.

Net charge-offs will rise substantially in ‘24 but cost of funding loan losses will be manageable



Data compiled April 5, 2023.
A = actual; P = projected.
* Average of provisions for loan losses/net revenue from 2013-2019. Net revenue = net interest income + noninterest income - noninterest expense.
Source: S&P Global Market Intelligence.

We expect net charge-offs to jump in 2023 off a historically low base to 0.47% of average loans. Credit slippage will coincide with many community banks adopting the current expected credit loss model — a reserve methodology that requires institutions to reserve for losses over the life of their loan portfolios. The implementation and higher loss content will mandate higher provisions for loan losses, which will serve as a modest hit to earnings.

We expect provisions to rise to 24.0% of net revenue in 2023, up from just 12.7% in 2022. From 2013 to 2019, banks' provisions equated to 14.5% of net revenue on average.

Looking ahead

Significantly higher interest rates and a crisis of confidence at a handful of institutions have put US banks' liquidity in the crosshairs and will lead to pressure on net interest margins. At the same time, economic uncertainty due to persistently high inflation, notable increases in rates and recent turmoil in the markets should cause banks to build reserves for loan losses in 2023. Taken together, margin compression and increased credit costs will take a bite out of bank earnings in 2023.

The headwinds to earnings could prompt some banks that had previously contemplated selling to take the plunge and partner with other institutions. Bank M&A activity through the first three months of 2023 stood at one of the weakest levels in history as institutions grappled with the fast-changing operating environment. However, the cost savings associated with deals will eventually make M&A an attractive way to mitigate earnings pressure.

Potential regulatory changes stemming from the liquidity crisis in March 2023 could also encourage future deal activity. Regulators have already suggested instituting greater regulation for institutions with more than $100 billion in assets. Silicon Valley and Signature Bank both grew above that threshold after a 2018 policy change provided an off-ramp exempting banks with between $50 billion and $250 billion in assets from provisions like macroprudential regulation and the liquidity coverage ratio, both of which were designed to enhance the safety and soundness of institutions in the aftermath of the financial crisis.

While any new rules likely would take a while to be adopted, many banks, including those with below $50 billion in assets, could see new regulatory focus on their liquidity sources and deposit makeup. Regulators and bankers could view investments in their bond portfolio differently after the shakeout that occurred in the early spring of 2023 and might place greater importance on shorter-term, liquid investments. In the wake of the Silicon Valley Bank failure, both regulators and bankers will also seek to limit uninsured deposit concentration and outsized exposure to single industries.

About the authors

Nathan Stovall is the director of the financial institutions research group and covers the US banking industry for S&P Global Market Intelligence. He has covered the banking industry in various capacities since joining SNL Financial, a predecessor to Market Intelligence, in 2003.

He is the author of banking blog “Street Talk” and hosts the podcast of the same name. Based in Charlotte, NC, Nathan Stovall writes annual market reports on the US banking industry and US community banks in aggregate along with various other thought leadership, providing outlooks and insight on key industry trends and developments. He is responsible for periodic research analyzing bank balance sheet and M&A trends as well as the convergence between banks and fintech companies.

Zain Tariq is the manager of the US financial institutions research team and covers the US banking industry for S&P Global Market Intelligence. He has covered the banking space for over eight years including regulatory changes, financial trends, branch footprints and M&A. Prior to joining S&P, Zain collected experience as a finance officer and accountant for multiple organizations.

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