

## SECTOR COMMENT

13 March 2023



### TABLE OF CONTENTS

Key risk metrics informing our rating actions on US banks that are particularly vulnerable to the current, deteriorating operating environment	2
Sources of US bank risk, and stabilization, in the current cycle of policy tightening	3
Looking ahead as the US bank risk landscape continues to evolve	4

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## Banks – US

# Rapid monetary tightening, weak risk management amplify banks' underlying asset-liability risk

On 9 March, the California state banking regulator closed Silicon Valley Bank (SVB) and appointed the FDIC<sup>1</sup> as receiver, after the bank's attempt to address a very significant asset liability management (ALM) mismatch resulted in a deposit run and, in turn, the bank's failure. SVB's failure followed by just a few days the announcement that Silvergate Capital Corporation (SI) was winding down its banking subsidiary and paying off all remaining depositors. SI also had a sizable outflow of uninsured crypto-related deposits and suffered losses on long-dated securities it was forced to liquidate to meet those outflows. On 12 March, the New York State banking regulator closed Signature Bank (SBNY) and appointed the FDIC as receiver. SBNY, which also banked some crypto firms and had ALM vulnerabilities, faced significant deposit outflows and funding contagion from SVB's failure.

While these three banks were unique in their focus on crypto and venture capital/private equity – areas of non-bank finance that grew quickly during easy monetary policy – it is increasingly evident that other US banks are also facing ALM strains. As we have highlighted in previous research, the very steep increase in the fed funds rate and [withdrawal of unconventional monetary policy](#) are combining to [reduce bank deposits and weaken bank liquidity](#), which has exacerbated challenges for some US banks in weathering this cycle. Some US banks also have demonstrated weak governance and oversight of ALM risk.

In light of these risks, which will persist in a continued period of tightened monetary policy, we have taken actions on several US banks, for which we present key metrics and considerations in the first section below. The main sources of risk, and stabilization, that inform these actions include the following, each of which we discuss in subsequent sections:

- » Announced support from the US Treasury and Federal Reserve has been constructive in providing systemic stability
- » Some US banks' ALM risks are higher and will remain so through the present period of tightening monetary policy
- » Bank capitalization is weaker as a result of unrealized securities losses
- » Bank profitability will also suffer, though some stronger institutions may benefit from a flight to quality

## Key risk metrics informing our rating actions on US banks that are particularly vulnerable to the current, deteriorating operating environment

Despite official sector actions to address deposit runs, we believe that significantly higher interest rates will continue to weigh on some US banks' profitability and economic capital. The official sector's action is intended to protect the system against further funding runs but does not address banks' vulnerability to excessive interest rate risk, which was the root cause of these banks' distress. We see the approach taken as credit positive for uninsured depositors; however, bondholders and equity holders will still need to absorb the economic losses some banks face related to higher interest rates as well as credit losses that are likely to rise with the coming turn in the economic cycle. Even with the benefits of the government's credit positive response, banks may still have difficulty raising fresh equity capital and have limited ability to generate capital internally given their excess interest rate risk and asset-liability management mismatch. Therefore, we believe some US banks remain exposed to increased ALM risk, reduced profitability and elevated credit risk in this period of continued monetary tightening, and accordingly we are reviewing the ratings of a select group of banks.

In light of the fact that the Federal Reserve's policy tightening may cause broader strains on profitability and capital in the US banking sector, with negative implications for additional banks, Exhibit 1 summarizes the metrics that have informed our recent rating actions on select US regional and community banks, and Exhibit 2 presents their ratings, Baseline Credit Assessments (BCAs) and outlooks.

Specifically, we take a multidimensional approach in evaluating unrealized available-for-sale (AFS) and held-to-maturity (HTM) securities losses, capital, profitability and diversification of deposit mix, all of which makes the banks below more exposed to ALM risks than peers. We evaluate the size of unrealized securities losses scaled to a bank's Common Equity Tier 1, consider both risk-based capital and Tier 1 leverage, look at deposit growth and uninsured deposit share and review banks' profitability, the first buffer against loss. Although we have taken action on a limited group of banks, we will continue to evaluate and monitor developments in ALM risk. Ongoing developments in the US banking sector and broader operating environment, in particular as they related to interest rate and ALM risks, may result in further rating actions, as warranted.

Exhibit 1

### Fed tightening cycle and prior risk management decisions pose ALM challenges for some banks

Selected indicators driving the recent rating actions

Bank Name	AFS+ HTM Losses / CET1	Common Equity Tier 1 Ratio	Net income / Tangible Assets	Uninsured domestic deposits share
<b>Q2 2022</b>				
Silvergate Capital Corporation	-49.7%	45.1%	0.9%	98.0%
SVB Financial Group	-101.1%	12.0%	0.8%	94.5%
<b>Q4 2022</b>				
Signature Bank	-34.5%	10.4%	0.8%	89.7%
First Republic Bank	-37.7%	9.1%	1.2%	67.7%
INTRUST Financial Corporation	-91.3%	9.6%	1.2%	41.2%
Western Alliance Bancorporation	-20.8%	9.3%	1.6%	57.7%
Comerica Incorporated	-38.5%	10.0%	1.1%	62.5%
UMB Financial Corporation	-51.4%	10.6%	1.1%	75.1%
Zions Bancorporation, National Association	-50.8%	9.7%	1.0%	52.5%

1) Unrealized HTM losses includes net of unrealized gain (loss) of HTM included in AOCI; 2) Net income / tangible assets are Moody's-adjusted ratios

Source: Company filings, Y9-C reports, FFIEC call reports, Moody's Investors Service

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the issuer/deal page on <https://ratings.moody.com> for the most updated credit rating action information and rating history.

Exhibit 2

**Ratings summary**

Recent rating actions, as of 13 March 2023

	Senior Unsecured / Issuer Rating	Baseline Credit Assessment	Outlook
Silvergate Capital Corporation	Ca	caa3	RUR Down
SVB Financial Group	C	c	-
Signature Bank	C	c	-
First Republic Bank	Baa1	a3	RUR Down
INTRUST Financial Corporation	Baa2	baa1	RUR Down
Western Alliance Bancorporation	Baa2	baa1	RUR Down
Comerica Incorporated	A3	a2	RUR Down
UMB Financial Corporation	A3	a2	RUR Down
Zions Bancorporation, National Association	Baa1	a3	RUR Down

Source: Moody's Investors Service

**Sources of US bank risk, and stabilization, in the current cycle of policy tightening**

The developments of the past week have broad implications for the US banking system that we have reflected in an update of the Banking System Outlook to negative from stable, in addition to taking rating actions on select banks, as detailed above. Our analysis of US bank credit in this deteriorating and dynamic environment reflects several underlying considerations and developments, as detailed below. Generally, banks with substantial unrealized securities losses, as well as large amounts of non-retail and uninsured US deposits, will be more sensitive to depositor competition or ultimate flight, with adverse effects on funding, liquidity, earnings and capital.

**Announced support from the Federal Reserve has been constructive in providing systemic funding stability**

Specifically, the US government invoked the systemic risk exception and announced that depositors at SVB and SBNY in excess of the FDIC insurance threshold would be fully repaid, even as equity holders and certain unsecured debtholders face losses. Further, the FDIC's deposit insurance fund (DIF) will be tapped to cover any losses associated with these actions. Since the DIF's balance comes from assessments on US banks, there will be no taxpayer cost associated with this decision. Additionally, the Federal Reserve and Treasury Department announced the creation of a new Bank Term Funding Program (BTFP), offering loans of up to one year in length to banks, savings associations, credit unions, and other eligible depository institutions pledging U.S. Treasuries, agency debt and mortgage-backed securities, and other qualifying assets owned prior to the facility's announcement date. Unlike a Federal Home Loan Bank advance, per the BTFP terms and conditions, the Federal Reserve will value eligible assets held by banks at par and not subject these securities to a haircut. Additionally, the loans would be for a one-year term and priced at one-year overnight index swap rate plus 10 basis points. This facility will assist banks facing strains related to funding long-dated government securities on their balance sheet and thus, if utilized, could help offset pressures US banks face from quantitative tightening (QT). Specifically, BTFP utilization would work akin to quantitative easing, inject reserves into the banking system, and increase banks' cash holdings. It could help offset banking systemwide funding strains stemming from deposit runoff related to QT and tighter financial conditions.

**US banks' ALM risks are higher and will remain so through the present period of tightening monetary policy**

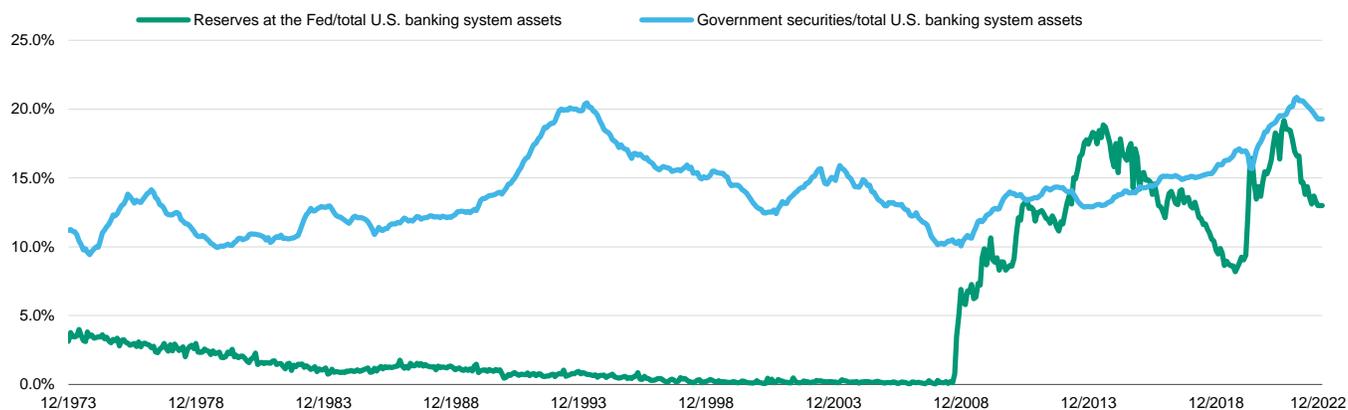
Pandemic-related fiscal stimulus, more than a decade of ultralow interest rates and unconventional monetary policy (i.e., quantitative easing) resulted in significant excess deposit creation in the US banking sector. Indeed, US banks' loan to deposit ratio dropped to a 50-year low of roughly 60 percent in September 2021. Very low US interest rates pressured net interest margins and encouraged some banks to invest at least a portion of their excess deposits into longer-dated fixed-income securities. This proved to be a poor risk-management decision for some banks, as the rapid rise in US interest rates in 2022 has resulted in significant unrealized losses on some US banks' AFS and HTM securities holdings even as the Federal Reserve's quantitative tightening has reduced banking system deposits, pressuring some banks' funding. US banks' loan to deposit ratio has risen to 68 percent as of February 2023, but a further rise seems likely as the ratio is still well below pre-pandemic levels in the high 70s. The newly created BTFP is intended to buffer banks from the increased risks that ongoing tightening in bank funding raise; namely, the possible need to sell underwater securities and crystallize unrealized losses related to higher interest rates, reducing their capitalization.

We have commented on the broader risk of US banks' high AFS and HTM securities holdings, especially in a period of [renewed quantitative tightening](#) (QT2), as well as regional banks' [weakened liquidity](#) as tighter monetary policy has created greater deposit

competition and even deposit outflows. QT2 and rising interest rates have driven up substantial unrealized losses on banks' AFS and HTM holdings, which banks increased during the preceding period of ultralow interest rates to defend falling net interest margins. In 2005, US banks' holdings of government securities totaled \$1 trillion, or 13 percent of US banks' balance sheet. Today banks' holdings of government securities have ballooned to \$4.4 trillion, or a whopping 19 percent of US banking system assets (Exhibit 3).

Exhibit 3

### US banks' holdings of government securities are near multi-decade highs even as their reserves at the Fed are declining January 1973 to February 2023



Source: Haver; Federal Reserve H.4.1 and H.8 data

On Tuesday 7 March, Federal Reserve Chair Powell told the Senate Banking Committee that there was “more work to do” as inflation is running higher than the Federal Reserve expected at its January meeting. The Chair’s hawkish comments caused a material upward repricing in market expectations for interest rates. Chair Powell’s testimony also appeared to suggest that a quick reversion in US interest rates to low levels that prevailed since 2008 should not be assumed.<sup>2</sup>

#### Bank capitalization has fallen because of material unrealized AFS losses

Significant interest rate increases have reduced the economic value of securities held on banks’ balance sheets. However, the accounting and regulatory treatment of unrealized securities losses can be a source of confusion. Specifically, for regional and community banks, unrealized AFS losses reduce the tangible common equity of the firm, but not the regulatory capital measures unless the AFS or HTM securities actually are sold to meet the bank’s liquidity needs. By contrast, for US Global Systemically Important Banks (G-SIBs), unrealized AFS losses not only reduce tangible equity capital but also flow through directly to a bank’s regulatory capital through adjustments to other comprehensive income. For some US G-SIBs, these unrealized AFS losses have reduced capital. G-SIBs’ unrealized HTM losses, however, do not flow through to regulatory capital.

Unrealized AFS and HTM losses could extend further through this Fed tightening cycle. Since 1991 the only previous aggregate decline in capital in the US banking system was during QT1. This decline in aggregate US banking system capital was quickly reversed when QT1 ended in the wake of the 2019 repo market disruption, after which the Fed moved into an easing cycle followed by significant pandemic stimulus.<sup>3</sup>

#### Bank profitability will also suffer, though some stronger institutions may benefit from a flight to quality

US banks have had sharply rising deposit costs after years of low funding costs, which for banks with significant securities and fixed rate loans, will reduce profitability. Banks with lower unrealized securities losses, stronger capitalization, diverse sectoral exposures, and granular insured deposit bases may, conversely, benefit from a flight to quality.

#### Looking ahead as the US bank risk landscape continues to evolve

The rating actions this week reflect the significant changes in the risk landscape of the US banking sector in light of rapidly rising interest rates and monetary tightening. During the review period, we will be assessing the ongoing impact of higher interest rates for longer on the funding, profitability and capital of a select group of banks. In a broader context, we will be assessing the overall resilience of the US banking sector to elevated ALM risks and an erosion of depositor and investor confidence.

## Endnotes

- [1](#) Federal Deposit Insurance Corporation
- [2](#) Moody's Investor Services US baseline macroeconomic outlook is for no Fed rate cuts in 2023.
- [3](#) Other types of bank assets – such as residential mortgages, commercial real estate and leverage loans – could also decline in value given significantly higher interest rates.

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