

US Rates Viewpoint

US rates FAQ: recent bank stress

US rates FAQs related to recent bank stress

We address frequently asked US rates client questions over recent days. Our message:

Direction of rates: highly dependent on the contagion outlook. Our base case is that contagion doesn't spread which suggests higher front-end rates, flatter curve, & lower vol. Fed will keep hiking and Fed quantitative tightening (QT) will continue in this scenario. If contagion spreads the UST front end could keep rallying, curve steepen, and Fed shift to a less aggressive stance of hikes/potential QT pause. BofA's base case remains for three more 25bp rate hikes and QT continuation; our rate forecasts remain unchanged, but we acknowledge downside risks.

Official sector response: The extent of the bank systemic contagion is unknown. If the current implicit guarantee of non-insured deposits proves insufficient, we think the government could consider other options. One extreme would be an explicit guarantee of all deposits. However, it would likely require an act of Congress. Changes in the path of the funds rate would only be a last resort. Fed cuts would reduce unrealized losses on bank securities portfolios and make money markets less attractive for deposit flight. Fed ON RRP cap likelihood and effectiveness seem low. There is a long tail of possible outcomes.

A summary of key questions and short answers across macro, funding, and technicals:

Outlook for nominals, breakevens, and vol? Contagion dependent, overdone if stabilization

Impact on Fed policy? Bank stability to be considered in further hikes, QT can still run

Fed facility impact? Fire sale risk lowered but has stigma risk; limited UST R/V impact

FHLB impact from facility? FHLB use should be robust because wider range of collateral

Funding impact? Unsecured tighter, secured funding stable, no risk off to ON RRP yet

X-date impact? Exchange Stabilization Fund (ESF) pledge may move X-date by few days; FDIC impact unlikely

Next steps if contagion? Deposit guarantee or Fed cuts only in extreme outcomes

Technical indications? Yield support in 2y and 10y from 200d averages and 5m yield lows

Bottom line: Rate outlook is contagion dependent. Base case of limited contagion and further Fed hikes means rate move overdone; higher-front end rates, flatter curve, lower vol, wider B/E. Fed facility will lower fire sale risk but has stigma risk; FHLBs still have important role even with new facility. Funding will see unsecured pressure but secured funding stable; ON RRP use may be a proxy for the extent of deposit flight into MMF. Deposit guarantee and Fed cuts to support banks only in extreme scenarios.

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Refer to important disclosures on page 13 to 14.

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US rates FAQs with bank stress

How low can 2y and 10y rates go?

This is conditional on the scale of macro-economic deterioration resulting from the current banking stress. Should banking stress pass through to the labor market and consumption, we would expect the market to price more significant Fed easing. While our US Economics team's base case for three more 25bp hikes through June pushes back on the significant rally at the front-end of the curve, the market is reflecting concerns around the growth outlook consistent with the selloff in commodities and equity risk premia widening (see report: [Markets/ banks now doing Fed's work](#)).

In the event of a more notable downshift in growth, we also think there is room for longer-dated tenors to rally. We think that confirmation on an economic slowdown means that asset managers are likely to cut risk allocations and move into less risky securities like USTs. At the start of the year the \$1.25 trillion in Aggregate benchmark AUM that we track showed a 13% underweight to USTs. Based on recent fund performance, we think it is unlikely that these funds have moved overweight and may still have room to cover a UST underweight position (see report: [Weekend Homework](#)). As of February, [our FX and Rates Sentiment Survey](#) (see report) reflected that investors were positioned roughly neutral UST duration vs benchmark.

The recent stress changes our view for the 10y trading range in two ways:

- **Reinforces our bullish bias in the range** – Our view on duration has been to trade the 3-4% range for 10yT tactically (see report: [Where is the 10yT fair value](#)): we have favored adding to duration exposures around the 3.75-4% top end of the range; and saw scope for tactical shorts as yields approached the bottom end of the 3-3.25% range (close to the expected steady state for 10yT over the medium term). The recent stress pushes us towards a more significant bullish bias in the range, i.e.: it supports adding with more conviction at the top end of the range; and limits the scope for shorts at the bottom end of the range.
- **Creates scope for 10s to reach lower levels in the cycle** – In softer landing scenarios for the US economy, which have been our baseline, we saw a convergence to the steady state levels for 10yT (around 2.75-3%) as the most likely scenario for the rates dynamic over 2023 and early 2024. Admittedly, this was a conservative call, as in slowdown scenarios one would generally expect a more significant level of richening to the steady state. The recent stress highlights material tail risks for the economy and increases the likelihood of harder landing scenarios. This creates the potential for more significant richening of yields relative to the steady state. If the range for 10yT over the next cycle is 1.25-4.25%, harder landing scenarios may take yields at least to the middle of the 1.25-2.75% bottom half of the range, i.e., harder landing scenarios contain the potential for 10yT yields to reach low 2% levels.

The outlook for 2y note yields is contingent: on the terminal level, the timing of the first cut in the cycle, how quickly the Fed is priced to reach the neutral, and the degree of overshoot of the neutral the market is willing to price for the Fed. The recent stress is likely to represent a shift in expectations for most of these:

- Terminal expectations are lower (see Exhibit 1) and likely also stickier from here as the market has awoken to the more significant tail risks that higher for longer policy rates pose for broader financial stability conditions.
- The market has frontloaded also the timing of the Fed pivot (to 1m – see Exhibit 2) and the first rate cut (now priced by August). These reflect a higher likelihood of hard landing scenarios, but even in scenarios where stress fades near-term we find it unlikely that the market: (1) goes back to pricing the pivot at a 5m horizon as it was the case early last week (a 3m horizon on a rolling basis seems more likely); and

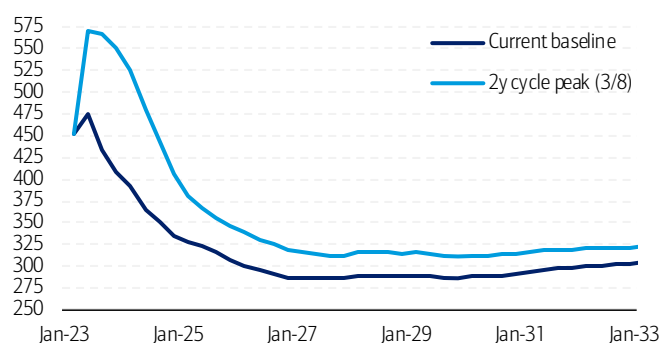
(2) pushes back on the timing of cuts all the way into early 2024 (it's more likely that we see the market continuing to price 2023 cuts).

- The market has also priced a faster conversion (by 1y, from end-2027 at the cycle peak for 2y yields to end-2026) to a lower trough (from c.3.15% to c.2.85% – see Exhibit 1) in the policy trajectory. The former has scope to get further frontloaded (into late 2025); the latter, we argued recently, likely reflects the view for the neutral rate which caps a potential further repricing beyond lows in the 2.25-2.5% context.

A scenario where the fed stays on hold in the 4.5-4.75% range, delivers the first cut by mid-2023, and converges to a neutral view in the 2.25-2.5% range by 4Q25 implies c.30bp further upside in 2yT yields, c.3.85%.

Exhibit 1: Shift in policy expectations between the 2y cycle peak (8th March) and currently

Lower terminal, frontloaded pivot and lower policy through medium-term



Source: BofA Global Research

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Exhibit 2: Market pricing if the Fed pivots

Shift from tightening to on-hold priced now at 1m horizon from a 5m horizon in early March



Source: BofA Global Research

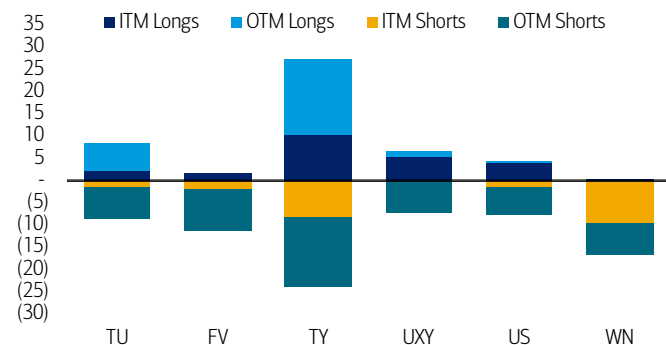
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How much has positioning contributed to the move?

We think positioning has likely been a notable contributor to the recent move. As of Friday close, shorts were more prominent across the curve, and with the quick pivot in momentum were largely out of the money (Exhibit 3).

Exhibit 3: Proxies for futures positioning

As of Friday close of business, shorts were more prominent and largely out of the money

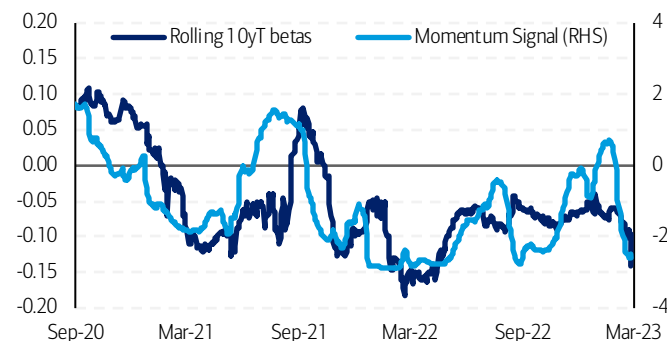


Source: BofA Global Research, Bloomberg

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Exhibit 4: CTA positioning in 10yT

CTA positioning as measured from our top-down model suggested some of shortest positioning since mid-2022 ahead of rally



Source: BofA Global Research

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Fresh short positions across TU, FV, and TY following Powell's testimony have likely been closed in recent sessions. Ahead of the recent swing in momentum, our top-down model suggests that CTAs were at the shortest level since the middle of last year (Exhibit 4). This position has also likely been prone to covering in the recent trading sessions.



How high can vol go?

The last leg of the vol spike has pushed 1y10y vol to c.120bp (the top end of the expected range for 2023 – see Exhibit 5), 1m10y vol to 160bp (not seen since the peak cycle yields in October 2022) and 1y1y vol back to the cycle highs around c.170bp. A further deterioration of risk sentiment from here can continue to push 1y10y vol higher. We see the potential for another 20bp normal move (into c.50% for lognormal vol from c.35% currently), and a roughly parallel move in this context across the grid.

Significantly, in scenarios where stress levels fade near-term and market continues to price a relatively anchored Fed (given the lower policy scope that tail risks from higher for longer frontend rates represent for financial stability conditions), we see scope for some normalization of vol with 1y10y vol potentially back to the 100-110bp bottom end of the expected range for 2023, and left side vol flatter to right side vol.

Exhibit 5: 1y10y vol vs expected range for 2023

1y10y vol now at the top end of the expected range

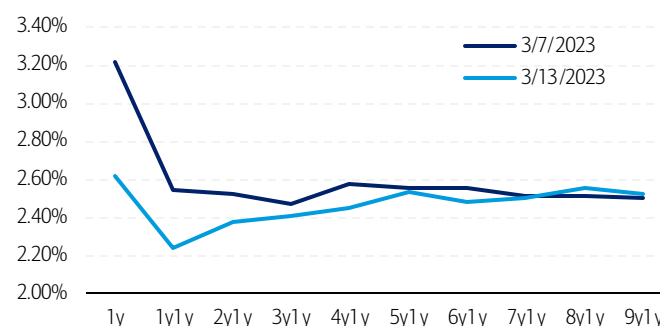


Source: BofA global Research

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Exhibit 6: Title: Inflation swap curve

Inflation compensation declined sharply in front-end, but longer-dated forwards are little-changed



Source: BofA Global Research, Bloomberg

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What does this mean for the Fed's fight against inflation?

Until now it was an easy choice for the Fed to keep tightening policy because both of its mandates were sending a hawkish signal: the labor market was hot, and inflation was well above target. We have been arguing that the Fed will pause when the labor market slows enough that there is a trade-off between its two mandates, forcing a more careful consideration of the "sacrifice ratio."

But the Fed has also taken on a third, implicit, financial stability mandate. Financial stability does not necessarily mean loose financial conditions: it means avoiding episodes of financial stress. The financial turmoil in recent days creates a trade-off between the Fed's price stability and financial stability mandates. In our view, it almost certainly takes a 50bp hike off the table at next week's meeting, regardless of tomorrow's CPI data. We stick to our forecast of 25bp hikes at the March, May and June meetings, on the premise that this is not a systemic shock. But we acknowledge that the risks to our view are now skewed towards the downside rather than the upside.

To be clear, we don't think the Fed will abandon its fight against inflation. Even if they opt to pause rate hikes, policymakers could signal (e.g., via the dot plot) that they plan to raise rates again later in the year, once the disruption in markets has eased up.

What does this imply for breakevens?

1y inflation swaps have dropped about 70bp on the week to 2.6% (Exhibit 6), more than outpacing the move implied from a decline in commodity prices. The market is likely accounting for a larger economic impact that will bring a sharper decline in inflation and is pricing YoY CPI to average below 3% over the second half of 2023. If the banking stress does indeed result in a more significant economic slowdown, the declines in inflation compensation over the next 1-2 years seems warranted. Indeed, we see room for breakevens to continue declining if financial conditions deteriorate further.

However, this week's CPI print is expected to confirm strong inflationary pressures as of February (see report: [Feb CPI Preview](#)). Without a meaningful growth impact stemming from the current banking crisis, it will be hard for the Fed to ease policy without losing credibility on the inflation mandate. If the Fed takes a more easy policy stance at the coming meeting, we think this would need to be accompanied by data-dependent guidance around future policy steps (i.e., future cuts are not a given without data reflecting significant slowdown). If the market extrapolates cuts without a clear growth impact from the banking stress, we could see the breakeven curve widen and steepen as more inflation term premium gets priced in.

Will Fed pause QT?

If actions by the regulators are successful at reducing financial stress and policymakers are inclined to continue with gradual increases in the policy rate, then we think the balance sheet runoff can continue at the current rate. New Fed facility use will increase Fed balance sheet size but that doesn't mean QT must stop.

Should actions by the Fed, Treasury, and FDIC be insufficient to prevent shocks to liquidity demand and their negative effects on economic activity, then the first step for the Fed would be to stop hiking rates. Next, we think it would put QT on hold. If further easing is warranted, it would cut rates.

The last step would be balance sheet expansion (QE). In our view, this would require a substantial weakening in economic activity. However, note that the Fed might use its Section 13(3) emergency powers to intervene in specific markets to ease financial stress, without engaging in broad QE.

Does new Fed facility stop UST fire sale potential?

UST fire sale potential from commercial banks has been materially reduced by the Bank Term Funding Program (BTFP). Banks will not need to sell large scale holdings of their liquidity portfolio to meet deposit outflows if they have the ability to post them to the Fed.

Despite the reduced potential for commercial bank UST fire sales there has been a material underperformance of USTs vs SOFR swaps, which is indicative of some Treasury liquidation ongoing. In addition, the UST underperformance is likely due to: (1) liquidity differential between swaps and cash instruments; (2) stop out of short swap positions that needed to be covered; and (3) elevated market volatility that has reportedly contributed to a deterioration of UST liquidity conditions.

Can I buy USTs and finance through the Fed's new facility?

No. Only collateral owned prior to March 12, 2023 are eligible for the Fed's new BTFP. Numerous clients have asked why cheap securities on the UST curve are not performing better given the ability of banks to buy them and post to Fed BTFP. The simple answer is that the BTFP only applies to bonds owed prior to March 12. There is no ability to post new securities to the Fed.

What does new Fed facility mean for FHLBs?

FHLB activity should likely remain robust, even with the new Fed BTFP. FHLB is likely to remain attractive for bank borrowers due to the wider range of collateral it is willing to lend against, lower stigma, and stable nature of its funding.

There was a material increase in FHLB funding activity on March 13, which suggests banks still see FHLB funding ability as attractive. FHLB can fund a wider set of collateral than the Fed's BTFP, including whole loans. We also suspect banks perceive a more favorable treatment from investors for FHLB use vs BTFP activity. FHLB activity is likely seen as a more standard funding source with rigorous collateral and eligibility requirements. There is no stigma associated with FHLB activity and there is likely to be stigma associated with the BTFP. Banks may prefer to reflect in their public quarterly reporting borrowing activity from FHLBs vs BTFP.



What to watch for in funding markets?

Clients have asked what to watch in funding for signs of broader stress/contagion. We offer thoughts based on (1) unsecured funding (2) secured funding (3) Fed facilities.

Unsecured funding:

LIBOR, cross currency basis, CP/CD: LIBOR is still produced and has been reflecting increased signs of credit stress. 3m LIBOR-OIS has widened 11bp since mid-last week. Risks are that LIBOR keeps widening out especially if bank credit contagion risk spreads. We think the cross-currency basis will also be a proxy for acute USD funding demand. Clients are reportedly using the cross-currency basis as a proxy for FRA-OIS trades, which have become less actively traded with the LIBOR transition. We also expect to see CP/CD spreads to OIS widen out if there is increased bank stress.

Fed funds (FF) and overnight bank funding rate (OBFR): FF and OBFR are overnight unsecured funding rates. We expect to see an increase in FF and OBFR rates and volumes if there is increased bank credit stress. There has recently been a sharp drop in FF volumes due to increased FHLB lending advance activity to member institutions, leaving them with less excess cash to lend overnight.

Secured funding:

SOFR rates and volumes are likely to rise if institutions are searching to raise liquidity via UST security sales. The SOFR rate has recently been stable and SOFR volumes declined, reflecting that any front-end selling has been met with strong investor demand.

Fed facilities:

Discount window and BTFP activity will be updated Thursday at 4:30 PM NY in the Fed's weekly balance sheet report. We expect to see both rise sharply this week. Fed ON RRP use may be proxy for extent of deposit flight into MMF. Since bank stress emerged last week ON RRP has declined, suggesting limited flight to quality into the facility to date.

Will recent policy actions bring forward the X-date?

The Fed's new facility, the BTFP, is backstopped by \$25bn from the Exchange Stabilization Fund (ESF). The ESF has several uses, including purchasing or selling foreign currencies. A portion of the fund is held in USD, which is invested in special-issue USTs which count against the debt limit. At the debt limit, Treasury suspends the investment of the dollar balance, which frees up \$17bn in headroom. The Fed does not expect to draw on this backstop but the \$25bn transfer from the ESF likely reduces headroom. We believe this would only bring forward the X-date by a few days at most.

It is possible the FDIC backstop moves debt limit timing but this seems unlikely. FDIC has \$128bn in deposit insurance fund (DIF) + assets to be sold from SVB and Signature. If FDIC DIF was exhausted, it would be rebuilt by assessments on banks and eventually Treasury/taxpayer funding. It would take something very extreme for Congress to authorize additional funding for FDIC and thus more UST debt outstanding.

Clearest interaction on the debt limit might be from bank stress leading to lower confidence leading to slower economy leading to lower gov't tax receipts leading to earlier debt limit date.

What are additional actions can be taken by authorities?

The extent of the bank systemic contagion is unknown. Our base case is for contagion to be limited. If the current implicit guarantee of non-insured deposits insufficient and contagion broadens, then we think the government could consider other options.

Policy makers will try very hard to address the pressure in markets using emergency tools. One extreme tool would be an explicit guarantee of all deposits. However, it would likely require an act of Congress. Changes in the path of the funds rate would only be a last resort. Fed cuts would reduce unrealized losses on bank securities portfolios and

make money markets less attractive for deposit flight. There is a long tail of possible outcomes, but the BofA base case remains limited contagion and 25 bp hikes at each of the next three meetings.

The Fed could consider reducing the cap of the ON RRP cap, currently at \$160b/counterparty. Impact of lower ON RRP cap means more cash into money markets. Lower money market rates lead to less attractive deposit alternatives. ON RRP is a pristine safe haven. If depositors running from smaller banks, MMF access at ON RRP has special value. MMF investment with Fed ON RRP is fully UST collateralized. Fed could limit ON RRP during period of acute bank deposit flight. Limited ON RRP access won't solve deposit flight but will make Fed safe-haven less accessible. We think the likelihood and effectiveness of this is low.

What is legal authority to provide government guarantee for all deposits?

In 2008, regulators implemented an optional bank-wide guarantee program that allowed participating banks to issue government-guaranteed debt and to protect deposit accounts with a government guarantee. Our understanding is that Dodd-Frank no longer allows regulators to provide a system-wide deposit guarantee, and that this can only be done by an act of Congress. We believe that Congress can act quickly if needed to guarantee all bank deposits, at some cost to participating banks, but clearer signs contagion will likely be needed before Congress deploys such a strategy.

Abbreviations:

AUM: Assets Under Management
 B/E: breakevens
 CD: Certificates of Deposit
 CP: Commercial Paper
 CTA: Commodity Trading Advisor
 FDIC: Federal Deposit Insurance Corporation
 FHLB: Federal Home Loan Bank System
 FRA-OIS: Forward rate agreement spread to overnight index swap
 LIBOR: London Interbank Offered Rate
 LIBOR-OIS: LIBOR spread to overnight index swap
 MMF: money market fund
 ON RRP: Overnight Reverse Repo Facility
 RV: Relative Value
 SOFR: Secured Overnight Financing Rate
 Vol: Volatility



Technical FAQs

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- US 2Y and 10Y yield levels: Rising 200d averages and five-month trailing yield lows offer initial yield support. For 2Y this is 3.89-4.03% and 10Y is 3.45% and 3.30%.
- If above levels break 2y may look more like Oct-1987. We compare history and if it continues to rhyme then 2y next goes to 3.18%/2.85% and 10Y to 3.00%/2.80%.
- US Curve: After last week's flattening capitulation, US 2s10s confirming a wedge bottom and US 5s30s on watch for a double bottom. Otherwise range bound.

FAQs: US yield levels, relevant patterns and past analogs

US 2Y yield tests five month low and 200d SMA, but how low if it breaks?

Ending the week of March 10th 2023 the US 2y formed a bullish reversal week. Yield made a new high (5.08%) and collapsed lower to 4.58% engulfing the prior two weeks of trading. Opening the week of March 13th yield sharply declined to a five-month low and is testing a yield support area of 3.98-4.03%. The 200d SMA (now at 3.88% and rising) offers additional nearby yield support. A break below these could open further downside such as major Fibonacci retracements of the prior cycle beginning in March 2020. A 38.2% Fibonacci retracement is 3.18%, a 50% retracement is 2.59% and a 61.8% retracement is 2%. A bounce higher in yield gets to 4.41-4.54% (middle of 6m range).

Chart 1: US 2Y yield – Daily chart

Support (Yield resistance): 4.41%, 4.54%, 4.67%, 4.80%, 5-5.08% | Resistance (Yield support): 3.99-4.03%, 3.88%, 3.55%, 3.45%, 3.18%, 3%, 2.59%, 2%



USGG2YR Index (US Generic Govt 2 Yr) RB: US 2yr Daily Daily 13MAR2020-13MAR2023

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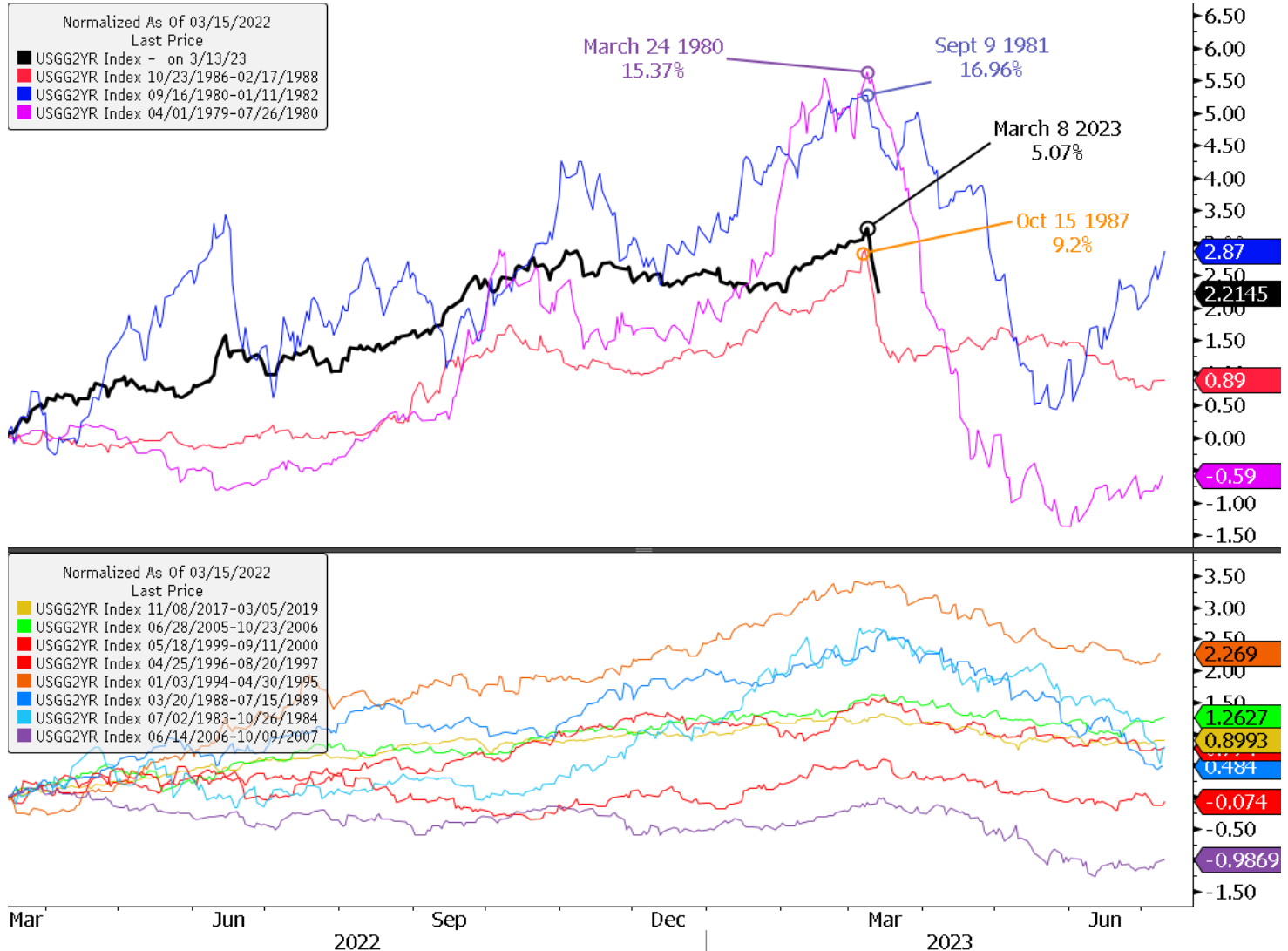


US 2Y yield drop has a similar look and feel to October 1987

In the chart below we overlay multiple US 2Y yield trends beginning one year prior to a major peak and then the trend six months after. The scale is normalized to net change. The resulting analog draws comparison to the 1987 yield peak and collapse. Larger trends and net drops included March 24, 1980, and September 9, 1981 (all in the top panel of the chart below). This comparison suggests there may be more downside for the 2Y yield during the next 3-6 months if the present continues to rhyme with these periods. All the other periods compared in the bottom panel saw a slower cycle turn with smaller/incremental yield declines.

Chart 2: US 2-year treasury yield analogs

In comparing the trend higher in US 2y yield beginning one year prior to major peaks, the result is a visual correlation today to the peak in Oct 1987. The trends leading up to the March 1980 and September 1981 peaks were larger net moves as yields were much higher than now, however those lines tend to track the present, too.



USGG2YR Index (US Generic Govt 2 Yr) US 2y now vs many norm Daily 15MAR2022-10JUL2023

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Source: BofA Global Research, Bloomberg

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US 10Y Yield hits the 200d SMA, so far holding it, but if it breaks...how low?

The MACD indicator turned down last week warning of a dip in yield. However the ensuing move outperformed our view (of a yield dip due) with yield plunging to the 200d SMA at 3.45%. So far the yield decline has halted at the 200d SMA. Below this would create downside risk to 3.30-3.32% (previous double bottom level). If 10Y yield is breaking below these YTD yield lows then 3% would become the next target. If this yield decline is part of the largest cycle turning lower than the first Fibonacci retracement target is a 38.2% retracement of the prior trend from the March 2020 yield low, which is 2.8%. The midpoint retracement is 2.32% and a deep retracement is 1.85%. Headlines that cause yield to move higher again can lead to 3.68%, 3.90% and possibly 4.09%.

Chart 3: US 10Y yield – Daily chart

Support (Yield resistance): 3.68%, 3.89%, 4%, 4.09%, 4.25%, 4.34%, 4.5% | Resistance (Yield support): 3.45%, 3.30%, 3.21%, 3%, 2.88%, 2.51%, 2.32%



USGG10YR Index (US Generic Govt 10 Yr) RB: US 10yr Daily Daily 14MAR2018-13MAR2023

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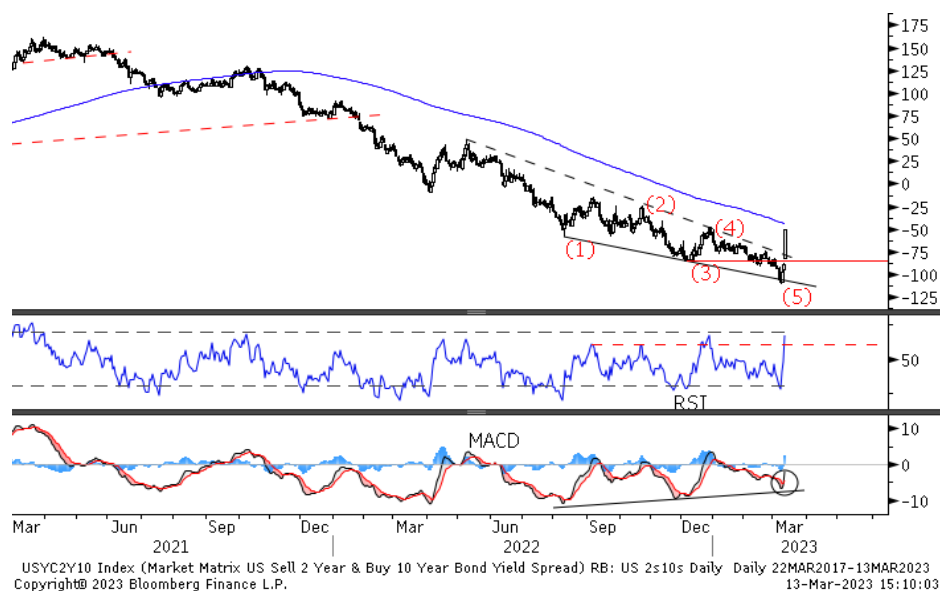
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US 2s10s: Five wave wedge bottom pattern seeking confirmation

A five-wave wedge bottom pattern can be confirmed by market actions with a 2s10s close steeper than -79 bp. This would add to the capitulate feel seen on the weekly chart ending last week (Reference report: [Macro risk-off chart pack 12 March 2023](#)).

Chart 4: US 2s10s – Daily chart

Five wave wedge bottom pattern limits flatter risks and implies range or steeper outcome.



Source: BofA Global Research, Bloomberg

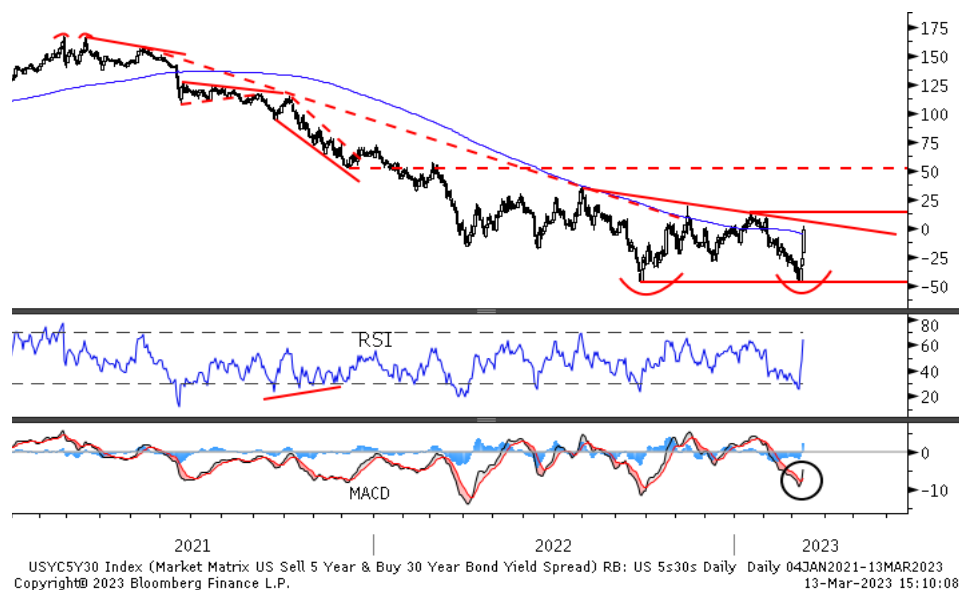
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US 5s30s: On watch to confirm a double bottom pattern

US 5s30s has steepened twice in the last six months from the -47bp level. This gives the chart a look and feel of a double bottom formation. Steeper than 12bp confirms the bottom and projects higher. While below it the trend is considered rangebound from +10 to -40 bp. We note last week's candle looked like capitulation and -47bp may be a key low for this flatter cycle (Reference report: [Macro risk-off chart pack 12 March 2023](#)).

Chart 5: US 5s30s – Daily chart

On watch to confirm a double bottom pattern with a second reversal steeper from the -47bp lows.



Source: BofA Global Research, Bloomberg

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