

Global Rates Weekly

Bonds Ahoy

The View: Damage assessment

While keeping an eye on potential bank deposit outflows, the market will likely enter a damage assessment phase, where it will look for signs of tighter lending conditions or weaker sentiment across consumers and/or SMEs. Eurozone CPI will be the key data next week. — S. Salim

Rates: Tighter lending, steeper ending

US: We expect lower rates & steeper curves, tighter lending => slower growth.

EU: We remain bearish on the front-end of the EUR curve, especially ahead of CPI next week and our analysis of the sub-components of core CPI. Swap spreads are 5-7bp rich.

UK: We think the BoE rate hikes are over, but the Bank left enough optionality to hike again, implying upside risks to our terminal Bank rate call of 4.25%.

AU: Front-end swap spreads have tightened modestly despite market volatility. We are reluctant to add a trade recommendation until the uncertainty around the outlook for corporate issuance is clearer.

JP: We think the recent decline in JPY rates was affected by the following three factors: 1) Short-covering, 2) BoJ maintaining its dovish policy at its March MPM, and 3) bank crises in US and Europe.

— M. Cabana, M. Swiber, B. Braizinha, R. Axel, S. Salim, E. Satko, A. Stengeryte, M. Capleton, O. Levingston, S. Yamada, T. Yamashita

Front end: Funding notes, money map and Fed facilities

US: We discuss money movement around system & discount window vs BTFP. Money moving = healthy, high borrowing = not healthy.

- M. Cabana, K. Craig

<u>Volatility</u>: Crisis averted...

US: Volatility pulled back from crisis levels highs, but the grid topography continues to reflect a significant level of near-term uncertainty.

- B. Braizinha

<u>Inflation</u>: Forecast revisions for lower real yields

US: Long end real yields a buy on recession fears and inflation uncertainty.

– M. Swiber

Technicals: US 2s10s & 5s30s bottom patterns confirmed

US: A wedge bottom pattern in US 2s10s and double bottom in the 5s30s implies the curve has turned at least range bound, if not the start of a steeper cycle.

- P: Ciana

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Refer to important disclosures on page 28 to 30. Analyst Certification on page 27. 12533033

Timestamp: 24 March 2023 02:05AM EDT

24 March 2023

Rates Research Global

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Our medium term views

Exhibit 1: Our medium-term views

Global views

Rational

Duration • US: Tra

- US: Trade UST long end with long duration bias & tactically in 10Y 3.25-3.75% range
- EU: We still expect the ECB to ultimately hike to 4% when the financial markets situation stabilizes. Medium term, we see Bunds rallying, with 10y yields down to 2.25% by year-end, as growth weakens and wage growth turns, supporting the pricing of rate cuts towards neutral from 2024.
- UK: We forecast 10y Gilt yields peaking at 3.75%, still above the forwards and underperforming on a cross market basis.
- JP: We remain bearish JP rates through 2023 as JGB market participants concern about a change in BoJ policy.
- AU: Rising inflation and accelerating wage growth supports AUD 10y yields around 4.5% and a flatter curve by '23 year-end.
- Front end •US: USTs vs OIS to trade with cheapening bias amidst more bill & FHLB supply; extent of cheapening is limited with MMF likely to soon extend out the curve
 - EU: We are bearish front Euribors as the market priced out hikes. Less excess liquidity to raise term premium in wholesale market. More bond supply to cheapen repo.
 - UK: We think the BoE rate hikes are over, but the Bank left enough optionality to hike again implying upside risks to our terminal Bank rate call of 4.25%.
 - AU: We are bearish the front end as the RBA delivers five 25 bps hikes between December '22 and May '23 to 4.1% terminal rate. Risks from increasingly dovish RBA.
- Curve US: Constructive on curve steepening, catalyzed by labor market moderation and led by 2y rate decline; premature Fed pause could also drive bear steepening
 - EU: We expect 2y-10y to flatten before steepening into 2024. In the long-end, 1H23 should see flattening pressure on 10s30s as PF receive rates to increase their hedge ratios.
 - UK: We expect some curve steepening pressures to emerge when the BoE is done with Bank rate hiking cycle. Outlook for 10s30s is more mixed.
 - JP: We expect the 10yr30yr JGB curve to remain steady through 2023 though real-money investors may increasingly shift from foreign bonds to JGBs
 - AU: We see a flattening of the curve as economy shifts from mid-cycle to late-cycle and RBA hikes rates in response to higher wage growth and inflation prints.
- nflation US: Favor long real yields at back-end of the curve on inflation risk premium upside and attractive levels vs Fed SEP
 - EU: Be short 15y15y EURi versus USDi. Market prices Euro CPI reversing more than half its cumulative underperformance versus US CPI over next 30yrs. We would oppose this.
 - UK: We suggest a barbell spanning 10-25y UKTis to express a forward real curve flattening view. We recommend a long in 50y BEs on supply expectations and convexity gain.
 - JP: We expect wider Japan's BEI, reflecting our hawkish inflation outlook.
- Spreads US: Treasury market resilience efforts plus lower supply and potential slowing of foreign selling is supportive of spreads, risk is large dollar strengthening or risk-off trade
 - EU: The periphery can remain resilient as the supply/demand balance is more favourable than in core EGBs. A turn in the data and an ECB going into highly restrictive territory should weigh on spreads in mid year. Given the cheapening of OATs, we see good risk-reward in shorting Bonos vs OATs
 - UK: Low coupon Gilts should be tax-efficient for retail and may outperform vs. high-coupon ones. 2s20s ASW curve should steepen amid large Gilt issuance with skew shorter
 - AU: We see inflationary pressures in AU compressing geographic spreads to US. We like a box trade (flattener in AU vs steepener in US).
 - US: Vol will drift lower in 2023, to flat levels of left vs right c.110bp by 1Q23, and cheap left side vs right by end-23 c.100bp
 - EU:. We position for lower vol only in forward space, and 10y tails. In vega, space, we believe the effective start of the transition to a new pension system in the Netherlands should provide support for long-dated vol in 30y tails.

Source: BofA Global Research

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Our key forecasts

Exhibit 2: Our key forecasts

Global forecasts

Vol

% EoP	2020	2021	2022	Q2 23	Q3 23	YE 2023	Q1 24	YE 2024
Fed Funds	0.00-0.25	0.00-0.25	4.25-4.50	5.00-5.25	5.00-5.25	5.00-5.25	4.75-5.00	3.25-3.50
10-year Treasuries	0.92	1.51	3.88	3.50	3.35	3.25	3.25	3.25
ECB refi rate	0.00	0.00	2.50	4.25	4.50	4.50	4.50	3.75
10y Bunds	-0.57	-0.18	2.57	2.75	2.50	2.25		2.25
BoJ	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	0.05
10y JGBs	0.02	0.07	0.41	0.50	0.50	0.50	0.50	0.70
BoE base rate	0.10	0.25	3.50	4.25	4.25	4.25	4.00	3.75
10y Gilts	0.19	0.97	3.66	3.75	3.75	3.75		3.75
RBA cash rate	0.10	0.10	3.10	4.10	4.10	4.10	4.10	4.10
10y ACGBs	0.97	1.67	4.05	4.00	3.90	3.80		3.60

Source: BofA Global Research

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What we like right now

Exhibit 3: What we like right now

Global views

AMRS: We see risks of higher front-end rates due to inflation uncertainty, but slowdown concerns should keep longer dated rates more anchored

EMEA: In EUR, we are short Sep23 Euribor. In UK, we position for 2s20s ASW curve steepening.

APAC: In AU, we favor paid Jun RBA OIS positions, and 2s10s flatteners vs the US.

Source: BofA Global Research; For a complete list of our open trades and those dosed over the past 12 months, please see below.



The View

Sphia Salim

MLI (UK)

The week that will be

The market could breathe sight of relief this week and rates volatility corrected lower as a solution was found for Credit Suisse and shares in US regional bank stabilized. While renewed deposit outflows are a risk, we are entering a phase of damage assessment.

Contagion: that Eurozone banks still decided to voluntarily repay €88bn of TLTRO funding next week is a positive sign. We also note the absence of strong USD funding pressures globally, with little taken at the 7-day USD operations (<u>Global Rates Watch</u>). However, we continue to monitor for signs of US banks' deposit outflows, looking at daily MMF inflows (<u>MMF portfolio update</u>), FHLB issuance and weekly use of the Fed's discount window and new BTFP facility (<u>Funding notes: money map & Fed facilities</u>).

Economic Impact: Fed's Powell argued that traditional financial condition indices may be underestimating the tightening created by the banking turmoil, as they focus on rates & equities but not on lending conditions. Our economists agree and have revised their Fed call to a terminal of 5-5.25% (removing the June hike – <u>US Watch, 22-Mar</u>). We adjust our US yield forecasts, especially in the front-end to reflect this (<u>Rates -US</u>).

The market will be hunting for evidence of such tightening in the US (or lack thereof in Europe) and monitoring the "damage" to consumer confidence & corporate sentiment. Surveys could be useful, although attention will have to be paid to the running period. Today's preliminary March PMIs in Japan, EZ, UK and the US should be referring to the period post SVB stress but may not include many days post Credit Suisse. The German IFO release (Monday) could incorporate comments on the effect of bank closures on the answering behavior. We will also get US consumer confidence on Tuesday and China PMI on Friday, with Chicago PMI and U. of Michigan sentiment + inflation expectations.

CB reaction functions: ECB speakers this week were rather hawkish, in contrast with Fed's Powell. 10 ECB speeches between today & next Friday. 3 in the calendar for Fed.

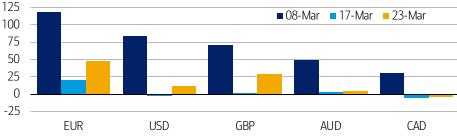
Eurozone CPI will be the key data release next week (GE & SP on Thu, Eurozone on Fri). Our economists expect headline to fall by c.140bp but core to remain flat. This would reinforce our bearish view on Sep23 Euribor (EUR front-end: fade the rally in Sep23).

Quarter-end rebalancing and index extensions should be bullish USTs & EGBs. Next week could be the one with the most negative net EGB supply pressures of 1H23 (see <u>EUR Rates Supply</u>). We still do not see any impact from the protests in France on OATs.

The week that was

The SNB hiked by 50bp, while the Fed, BoE and Norges all delivered a 25bp hike. The Fed was seen as dovish, with economic projections that reflected additional tightening in financial conditions. Pricing for terminal rates recovered from the lows (Exhibit 4).

Exhibit 4: Additional hikes priced across major economies, beyond this week's hikes Large differentiation in the extent of the recovery in market pricing of hikes



Source: Bloomberg, BofA Global Research



Rates - US

Mark Cabana, CFA Meghan Swiber, CFA

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• We expect lower rates & steeper curves, tighter lending => slower growth

Post Fed: lower terminal & rate forecasts; vol = upper left too high vs upper right

Tighter lending, steeper ending

US rates held their recent declines amidst elevated daily volatility. The market focus this week was on: (1) Fed & their dovish 25bps hike (2) banking system stability.

We discuss our Fed takeaways, impact of tighter lending standards on rates & inflation, & shifting curve dynamics. On net, we continue to expect lower rates & a steeper curve.

March FOMC: dovish hike

The US rates market viewed the March FOMC meeting as a dovish hike. The rates market interpretation was driven by: language in statement and press conference discussing tighter credit conditions, "some" vs "ongoing" policy firming, and Powell's comments that the Fed considered a pause. Powell also made clear that the expected tightening in credit standards would effectively substitute for rate hikes.

The dovish hike re-affirms our view for lower rates over time. The shift in Fed rhetoric and possibility of credit tightening substituting for rate hikes also likely means that the UST curve is biased to move steeper vs flatter. A Fed more cautious about credit standard tightening is likely to mean a more moderate pace of hikes, if any at all.

The Fed clearly sees the expected tightening of lending conditions as equal to additional policy tightening, which means less need for rate hikes. This means that the market is likely to see soft economic data as implying a lower bar for rate cuts, while strong data may be met with higher inflation risk premium and wider breakevens further out the curve. Consistent with this latter market interpretation, 10y breakeven rates of inflation widened meaningfully in the immediate aftermath of March FOMC communications.

The FOMC meeting caused our economists to trim one hike from their Fed path. They now see one more 25bp hike this cycle at the May FOMC meeting for a terminal rate of 5.25-5%; for detail see: March FOMC: tighter lending standards mean less policy firming.

Rate forecasts: trimming lower

We update our rate forecasts after our economist's team change in Fed call. The adjustments are primarily centered on lower 2y; we hold our end '23 10y forecast but lower the path (Exhibit 5). We see downside risks to our rate forecasts.

Specifically, our new rate forecasts envision a lower path for 2s & 10s along with a less inverted curve. We now expect only 25bps of inversion in 2s10s by end '23, in-line with our US economist's call for a recession in 2H23 & rate cuts in early '24. We expect a steeper 2s10s curve by end '24; the market will likely expect the Fed to adopt an accommodative policy stance for growth prospects to improve by late '24.

Our 10 & 30Y forecasts have consistently been below the forwards & the market has moved in-line with our view. Our 10 & 30Y forecasts are in-line with the forwards through Q3 '23 but remain below the forwards from Q4 '23 onwards. Our 2 & 5Y forecasts are above the forwards through '23 reflecting our economist base case for one more hike in May & no cuts until Mar '24. We see downside risk to our 2 & 5Y forecasts.



Exhibit 5: BofA rate forecasts (%)

We revise rate forecasts lower with lower Fed terminal rate & tighter bank lending impact on outlook

	New Forecast (%)						Old Forecast (%)				Change (%)			
	Q2 23	Q3 23	Q4 23	Q1 24	Q2 24	Q4 24	Q2 23	Q3 23	Q4 23	Q4 24	Q2 23	Q3 23	Q4 23	Q4 24
2y Govt	4.00	3.75	3.50	3.25	3.00	2.75	4.50	4.15	3.75	3.00	-0.50	-0.40	-0.25	-0.25
5y Govt	3.60	3.45	3.40	3.25	3.10	3.00	4.05	3.80	3.50	3.15	-0.45	-0.35	-0.10	-0.15
10y Govt	3.50	3.35	3.25	3.25	3.25	3.25	3.75	3.50	3.25	3.25	-0.25	-0.15	0.00	0
30y Govt	3.70	3.55	3.40	3.40	3.45	3.50	3.85	3.65	3.40	3.50	-0.15	-0.10	0.00	0
2s10s	-0.50	-0.40	-0.25	0.00	0.25	0.50	-0.75	-0.65	-0.50	0.25	0.25	0.25	0.25	0.25
5s30s	0.10	0.10	0.00	0.15	0.35	0.50	-0.20	-0.15	-0.10	0.35	0.30	0.25	0.10	0.15
10s30s	0.20	0.20	0.15	0.15	0.20	0.25	0.10	0.15	0.15	0.25	0.10	0.05	0.00	0.00

Source: BofA Global Research

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Lending standards: steeper nominal & breakeven curves

The Fed clearly expects a negative impact of tighter lending on the real economy. Powell was clear that their expected tightening in lending standards equated to a couple 25bp rate hikes. The market clearly sees this as a lower terminal & potentially earlier cuts.

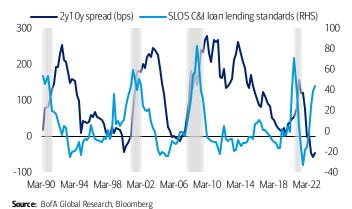
Historically, a sharp tightening of lending standards has typically occurred with a recession & steeper curve (Exhibit 6). We acknowledge that the lending tightening & recession relationship is not causal. The sharp tightening in lending standards did not cause the '08 or '20 recessions. Rather, the recession caused the lending tightening.

Our economists recently estimated the impact of sharp lending tightening on the economy. They find that a one standard deviation tightening in lending standards could lead to a cumulative 1-2% decline in personal consumption over 6 quarters. For more detail see the report: Estimating downside risk from a sharp tightening in bank lending standards.

The rates market clearly expects a sharper impact into the real economy as shown through sharp rate cut pricing (Exhibit 7). We see rate cut pricing as extreme against a backdrop of still resilient US economic data. We therefore prefer to express any steepening expression 5s30s vs 2s10s. A 5s30s curve steepener is less sensitive to the exact time of rate cuts vs 2s10s. It may also benefit from a greater possibility of inflation risk premium buildup if the Fed is seen as prematurely pausing.

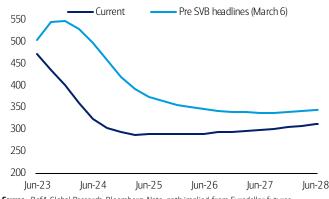
Exhibit 6: 2y10y curve and SLOS lending standards

Tighter lending standards tends to coincide with steeper curve & recessions



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Exhibit 7: Market-implied policy pathMarket is pricing earlier and sharper cuts vs pre bank risk events



Source: BofA Global Research, Bloomberg. Note: path implied from Eurodollar futures

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Elsewhere in rates vol pulled back from crisis level highs; we see scope to fade some of the grid distortions, particularly the richness of left vs right side (see US Volatility).

Bottom line: we continue to expect lower rates & steeper curves over time. Current rate cut pricing seems extreme; we prefer 5s30s vs 2s10s steepeners. Upper left vol vs right side vol looks too high for a Fed likely nearing its last hike of cycle.



Rates - EU

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- The rates market is still volatile, with moves on the EUR curve still driven by the front-end (ECB expectations). We remain in the bearish camp for front-end rates.
- The March inflation release could support additional sell-off. But already, an analysis
 of core HICP components already argues for an upside skew to the market's central
 case for the front-end and inflation swaps.
- We update our ASW fair value charts, following the large swings. Swap spreads are currently 5-7bp too wide across 2y, 5y and 10y. We remain most bearish on the 10y.

Anchors away?

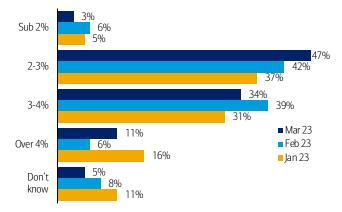
Our economists expect Eurozone headline inflation to drop by 140bp in March but see core flat at around 5.6%. The stickiness in core inflation should support out bearish view on Sep23 Euribor (target: 4.25%, stop: 2.75%, current: 3.5%). The risks to the trade are a downside surprise in core inflation, or contagion on the banking front.

Our latest FX & Rates Sentiment Survey (see <u>'Surveying the Damage', 23 March</u>) provides a useful picture of the distribution of investor inflation expectations (Exhibit 8). While the largest bloc sees Euro inflation within a 2-3% range at end-2024, there is an aggressive upside skew to the balance, with only 3% of respondents seeing it below 2%.

The inflation swap market appears to place more trust in the power of positive thinking, with inflation projected drop to 2.34% at that horizon (Exhibit 9). Albeit a little abovetarget, market perceptions seem to be reasonably well-anchored to the ECB's goal.

Exhibit 8: I expect Eurozone inflation at the end of 2024 to be:

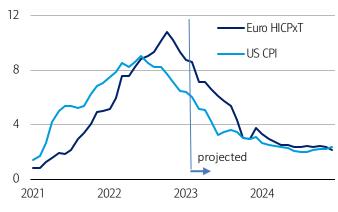
Shifting tails – respondents see persistent inflation.



Source: BofA Global Research FX and Rates Sentiment Survey

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Exhibit 9: Euro and US inflation paths priced by the market, % Inflation broadly priced to fall as quickly as itclimbed.



Source: BofA Global Research

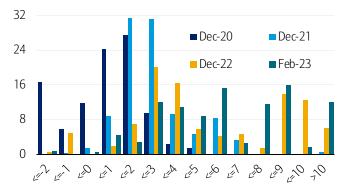
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Inflation forecasting isn't easy. And likely forecasting errors inevitably grow in times of high and volatile inflation. Yes, energy prices have plummeted, but the deflationary contribution from that source will have faded by an end-2024 horizon, (except insofar as there may be benign second round effects), and core measures have continued to climb.

As we used to discuss in calmer times, we can have confidence in inflation being stable and "anchored" if the subcomponents of the core inflation index are clustered around the desired rate with a nice bell-shaped distribution. This will obviously not be the case at the moment, but a troubling feature is how the dispersion has steadily increased month-by-month, up to and including the February data (Exhibit 10).



Exhibit 10: Distribution of core HICP component inflation rates, % Broadening dispersion points to uncertainty and possibly "unanchoring".



Source: BofA Global Research, Refinitiv

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Exhibit 11: Proportion of core HICP components with inflation sub-2% Both this chart and the chart on the left show weighted proportions.



Source: BofA Global Research, Refinitiv

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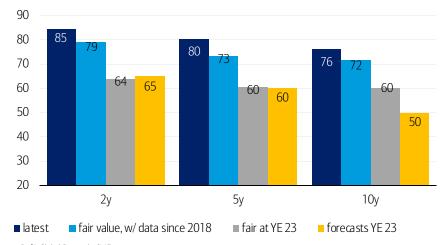
Alarmingly, only 6% of core HICP components, by weight, were recording inflation rates below 2% in February, by our calculations (Exhibit 11). To us, this suggests the ECB has more of a fight on its hands than either the nominal front-end or the inflation swap market seem to believe. At the very least we would say that there's an upside skew to the market's central case for both. There will likely be more for the ECB to do, especially if currently heightened concerns over a stress-driven tightening of financial conditions moderate.

Swap spreads: highly directional, and currently rich

Swap spreads have been extremely directional in recent events, widening in the 2y by around 5bp for each 10bp rally in swap rates. But going back to our fair valuations, based on swap spreads' historical relationship vs vol, Specific Collateral spreads to €str and the 1st component of periphery spreads, we find that swap spreads are around 5-7bp too wide currently. Assuming volatility declines to 100bp/annum by year-end, that German bond specialness dissipates, and that periphery spreads widen, fair values would drop to 60-65bp. We think 10y spreads could cheapen beyond that level (Exhibit 12). It is in the 10y that our forecasts are most bearish into year-end.

Exhibit 12: German swap spreads: current, fair and expectations for year-end

Swap spreads are around 5-7bp too wide (German bonds too rich vs swaps) when considering fair value based on vol, SC-Estr, and periphery spreads.



Source: BofA Global Research, CME group



Rates - UK

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• We think the BoE rate hikes are over, but the Bank left enough optionality to hike again implying upside risks to our terminal Bank rate call of 4.25%.

Wait and see

The Bank of England (BoE) hiked rates 25bp as expected on Thursday with the same 7-2 vote split as in February's meeting. The minutes were mostly balanced, noting faster than expected drops in wage growth offset by stronger than expected demand. The large upside inflation miss on Wednesday was a key reason to hike.

Our Chief UK Economist Rob Wood read the Monetary Policy Committee (MPC) minutes as raising upside risks to our terminal Bank rate call of 4.25%. He highlights that the BoE left enough optionality to hike again (Bank of England Review: options open, 23 March). We stick to our call of no more hikes for the time being. But our forecast will be sensitive to the data flow, especially the next inflation reading on 19 April and any impact on credit conditions from recent banking sector turmoil.

With regards to the inflation data, in Rob Wood's view, there was no silver lining in Wednesday's UK inflation report. The news was widespread across components and the data counted as signs of more inflation persistence. He raised CPI/RPI inflation forecast 40/30bp in 2023 to 6.4%/8.6%. For 2024 we now see CPI 10bp higher at 2.2% and RPI 10bp lower at 3.3% (Inflation forecast update: 25bp it is, 22 March).

MPC curve fairly priced for the time being

Unlike Wednesday's market interpretation of the Fed's 25bp hike as a clearly dovish one (March FOMC: Tighter lending standards mean less policy rate firming, 22 March) - expressed by a sharp 14bp bull steepening of the 2s10s USTs curve in the afternoon of the hike – market reaction to BoE's hike was more mixed, in line with our own reading of the minutes. 2s10s Gilt curve bull steepened a few basis points above midday levels, but only after flattening in the immediate aftermath first. At the time of writing 2y Gilts are trading some 5bp lower than at midday, while 10y is down 2bp.

At the front-end, the MPC-dated Sonia is pricing a nearly 70% chance of another 25bp hike in May (Exhibit 13). Terminal rate is priced at around 4.55%. We see this as broadly fair pricing given our base case and risks to it. We would be tempted to receive May MPC dated Sonia if pricing of 25bp Bank rate hike moved closer to certainty (unless it moved for reasons that would lead us to change our base case scenario also, of course).

BoE stopping the hikes should be consistent with steeper Sonia curve, as implied in our forecasts. Another hike in May could delay that dynamic towards the middle of 2023.

We continue to expect 2y Gilts to underperform relative to 2y Sonia and 2s20s Gilt ASW curve to steepen, on the back of significant skew shorter in Gilt issuance by the DMO from April. On 10 March, we recommended selling UKT 0.625% 2025 vs. UKT 3.5% 2045 on ASW at 129.5bp (on Z-spread OIS basis), targeting a spread of 70bp with a stop of 160bp. Current level is 131.3bp (Sell UKT 0.625% 2025 vs. UKT 3.5% 2045 on ASW ahead of next week's Budget, 10 March).



In inflation, we retain our upside bias in UK breakevens, with the current iteration of the view expressed at the very long end of the curve, via a breakeven long in UKTi 2068s entered at 340bp, targeting 375bp, with a stop-loss at 320bp. Current level is 329bp. Risk to the trade is heavy supply of ultralong linkers (Chasing R*ainbows, 28 February).

February's CGNCR potentially implies higher carry-over

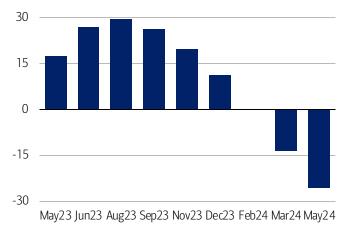
Turning back to supply and demand dynamics in the UK, Public Sector Finance data released earlier this week suggested that the DMO's 2022/23 fiscal year Remit is potentially heading for a slightly higher than projected "overfund" as of February, with one month of fiscal year remaining (UK public finances data for February: heading for a larger overfund, 21 March). The Central Government Net Cash Requirement (CGNCR) came in at £6.75bn in February. For the cumulative fiscal-year-to-February, the CGNCR stood at £86.19bn - £29.2bn away from Debt Management Office's (DMO) updated Fiscal Year (FY) 2022/23 target of 115.4bn (Exhibit 14).

Previously, we noted that the Office for Budget Responsibility's (OBR) projection for March 2023 diverged significantly from the historical pattern, at nearly double the average monthly figure. This should not be Asset Purchase Facility (APF)-related, we thought, given the next payment is due in April, and there are no obvious special factors to deliver this that we can see (such as a linker redemption). The updated projections imply £29.2bn in March, more in line with but still above the £22.0bn seen on average since FY 2010/11. If CGNCR came in closer to the average seasonal March number, it would potentially imply a slightly higher carry-over into FY 2023/24, reducing the £241bn Gilt financing need.

National Savings and Investment (NS&I) saw a £2.58bn inflow in February – the largest monthly flow so far this fiscal year – bringing the cumulative total to £6.15bn, exceeding the original £6.0bn goal and only slightly shy of the higher £6.6bn set in the Budget, including £0.5bn green NS&I bonds. Another strong month of inflows of similar magnitude would increase the overfund carried over into FY 2023/24, reducing Gilt financing need further.

UK public sector finances data for March will be published on 25 April, together with current fiscal year's Remit outturn. Based on February numbers, we suspect the carryover to next fiscal year will be slightly larger than current projection of £21.3bn. In the meantime, we will already have details of the full Gilt operations calendar for AprilJune at the time this report gets published, allowing better judgement of weekly and monthly supply flows. February's BoE Bankstats data is due next Wednesday, 29 March.

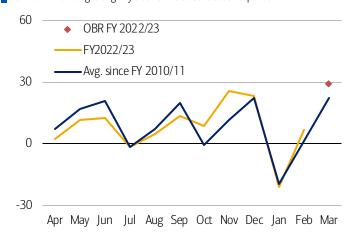
Exhibit 13: MPC-dated Sonia Bank Rate hike exp. vs. BofA f'casts, bp Around 70% chance of a 25bp Bank rate hike is currently priced in for May



Source: Bloomberg, BofA Global Research

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Exhibit 14: CGNCR ex. B&B, NRAM and NR monthly fluctuations, £bn OBR's March target slightly above the usual seasonal pattern



Source: OBR, ONS, BofA Global Research



Rates - AU

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This is an excerpt from <u>AU swap spreads: issuers key to near term</u> moves'

Trading in uncertain times

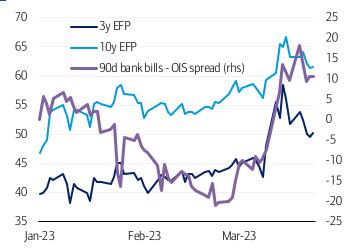
Despite relative calm around the middle of the week, the uncertainty around the outlook continues to remain elevated. The basis spread between 90d bank bills (bank bill swaps/BBSW) and overnight indexed swaps (OIS) continues to trade wide of its year-to-date trend, although forward-starting received BBSW-OIS basis (BOB) have performed well over the past few days. Front-end cross-currency has also shifted negative on risk-off moves and continues to trade near those levels (Exhibit 15).

Yet even as other measures of risk sentiment like spot bank bills-OIS basis (BOB) remain elevated, front-end swap spreads remained better bid. We do not see an attractive risk/reward in receiving EFP until a clearer picture of corporate issuance emerges.

Exhibit 15: Front-end cross currency showing signs of stress Although the moves after 10 March were not huge



Exhibit 16: 3y swap spreads has outperformed since 10 March Fundamentals



Source: Bloomberg, BofA Global Research *Swap EFP = Exchange-of-futures-for-physical (in this case, for swaps)

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From a flood to a trickle

Turmoil in the banking system from 10 March 2023 has meant new issuance has almost entirely evaporated. No new issues have been announced in the Kangaroo market (only taps) and the corporate issuance market has a lot of unmet demand. After falling from all-time high at the end of 2022, 3y EFP Kangaroo market enjoyed the strongest start to the year in over a decade (Exhibit 17). At the same, domestic corporate and bank issuance surged to a five-year high as pent-up demand from 2022, falling credit spreads, funding demand and robust investor appetite provided a platform for an especially crowded issuance schedule for fixed-rate debt in the first quarter (Exhibit 18).

The size of paying flows from corporate issuers and receiving flows from Kangaroo bond issuers was quite similar, which partly explains why front-end swap EFP traded sideways for most of the first quarter.



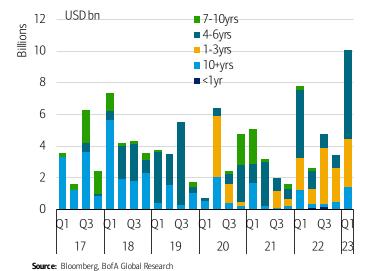
Outlook

The outlook for corporate issuance to re-emerge from this banking episode is stronger than the outlook for Kangaroo issuance, which would usually step down around the end of the quarter anyway. Credit spreads widened fast after 10 March but are still around the levels at the start of the year (Exhibit 20). Similarly, 3y swap rates are now trading through 3m BBSW which should also attract paying flows and could encourage additional corporates to the market.

The risk for received EFP positions is that corporate issuance rebounds strongly while Kangaroo issuance remains subdued. The risk for paid EFP positions is that the fundamentals skew in the favour of tighter EFP as the end of the cycle now appears to be closer than previously thought and bonds are likely to cheapen to swap as the cycle turns. Until a clearer picture of bank and corporate funding programs emerges from the banking crisis, though, the near-term outlook for EFP remains too uncertain.

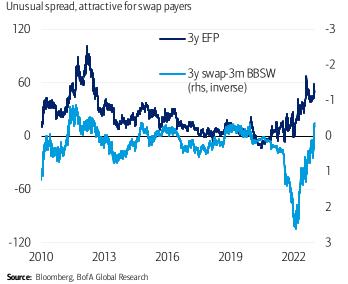
Exhibit 17: Kangaroo issuance focused in 4-6y bucket

Receiving flows from issuers in 3y swaps likely unchanged from H2 2022



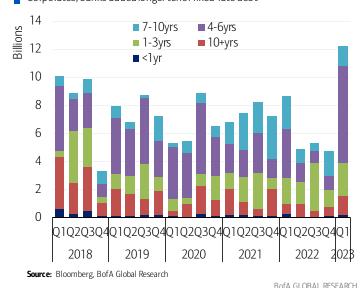
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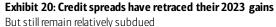
Exhibit 19: 3y swap rates trade through 3m BBSW



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Exhibit 18: Fixed-rate issuance in 4-6y bucket surged in Q1 23 Corporates, banks added longer tenor fixed-rate debt







Source: Bloomberg, BofA Global Research



Rates - JP

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- We think the recent decline in JPY rates was affected by the following three factors:
 Short-covering, 2) BoJ maintaining its dovish policy at its March MPM, and 3)
 bank crises in US and Europe
- We do not expect prolongation of the risk-off mode triggered in the US and look for the 10-30yr JGB yield curve to flatten

This is an excerpt from <u>Japan Rates Watch</u>: Expecting upward pressure on JPY rates to strengthen 20 March 2023

Expecting upward pressure on JPY rates to strengthen

Three reasons for recent decline in JPY rates

JPY rates have declined sharply recently, with the 10yr JGB yield falling to 0.245% on 20 March, down from 0.500% on 9 March, just before the release of the results of the BoJ's March Monetary Policy Meeting (MPM). We see the following three factors as the main reasons for this sudden drop in the 10yr JGB yield.

- (1) JPY rates positions were skewed to the short side: Considering that the most recent BofA's FX and Rates Sentiment Survey found investor JPY positions skewed toward short positions prior to the BoJ's March MPM (see <u>FX and Rates Sentiment Survey</u>: <u>Surveying the damage 20 March 2023</u>), we think that short covering was one factor behind the JGB rally that occurred after the MPM.
- (2) BoJ maintenance of its current monetary policy at the March MPM: Despite some expectations for hawkish policy revisions at the March MPM, the BoJ left all policies unchanged (see <u>Japan Watch: BoJ review: Governor gone, challenges remain 10 March 2023</u>).
- (3) Bank management crises in US and Europe: The recent failures of two US banks and the current management crisis at a major European bank have triggered a flight to quality.

Comparison with past financial crisis

A look back at the global financial crisis of 2007–08 may provide some insights into the JPY rate market's possible reaction to the current crisis. For starters, a global decline in rates began around summer 2007 owing to mounting concerns about an economic recession, but rates rebounded from around April 2008 in a response to rising crude oil prices and growing concerns about inflation. Another global decline in rates began in summer 2008, when crude oil prices were falling and financial instability was increasing. At the same time, tightening liquidity conditions prompted investors to move from bonds to cash.

These observations from the 2007–08 financial crisis indicate a couple of key trends in rates during a global financial crisis. First, when a crisis occurs in one major country, the movement of rates in other major countries tends to be highly correlated. Second, if investor risk tolerance decreases, they may remove government bonds of the major advanced countries from their investment portfolios, resulting in funds flowing out of the bond market and into major cash currencies, thus applying upward pressure on rates.



Expected direction of JPY rates

We expect JPY rates to rise in the weeks leading up to the next MPM on 27-28 April. Despite concerns about a financial crisis, the ECB raised their policy rates another 50bp on 16 March, clearly indicating it plans to continue to tighten monetary policy. Japan, meanwhile, also faces the risk of prolonged inflation (see <u>Japan Watch: February CPI: Slowing on government subsidies but price pressures remain 03 March 2023</u>), and a further decline in risk tolerance could lead investors to opt for increasing their current account deposits at the BoJ rather than holding JGBs.

We think the three factors cited above as reasons for the recent decline in JPY rates are gradually being resolved. As for the third factor—the current bank management crisis—our US Research team does not expect the stress in the US banking sector to spread widely and looks for the front-end of the US Treasury curve to rise, leading to a flatter curve (see <u>US Rates Viewpoint: US rates FAQ: recent bank stress 2023-03-14</u>). In addition, our European Credit Research team has pointed out that European banks' unrecognized losses on securities are not a major issue (see <u>European Banks: At a loss 2023-03-15</u>). As for the second factor—the BoJ's maintenance of its current monetary policy—a Bloomberg survey of 56 economists conducted 9-14 March generated a median forecast for the 10yr JGB yield at end-June of 0.59%, which indicates that some economists expect the BoJ to make some policy revisions prior to the June MPM. Lastly, regarding the first factor, considering the likelihood that short covering has been largely completed, we expect continued monetary tightening by major overseas central banks and growing inflationary pressures in Japan to apply greater upward pressure on JPY rates.

Implications for JPY rates

We do not expect the risk-off mode caused by the recent collapse of a couple of US banks to be prolonged, and we assume JPY rate volatility will gradually subside. Accordingly, we look for the yield curve in the 10-30yr range to flatten and expect to see continued demand for USD.

- JGB: As of 10 March, the BoJ's share of outstanding 10yr JGBs came to 105.4% for JB367, 103.7% for JB368, and 91.9% for JB369, indicating a sharp deterioration in the liquidity of on-the-run 10yr JGBs. Accordingly, from the perspective of bond market functioning, a YCC revision at the April MPM would not be a surprise, and we look for trades anticipating a BoJ policy revision to become the dominant force in the JGB market. In that case, we would expect a rather moderate rise in yields in the superlong zone, where BoJ holdings are relatively small, to lead to bear-flattening of the 10-30yr JGB curve. That said, the 10yr JGB yield is likely to hover around the 30bp level until the current risk-off mode subsides.
- TONA swaps: The TONA swap rate is rather volatile compared to the yields on JGB maturities up to 10 years, which are controlled by the BoJ. After March 2022, when the US Fed began hiking its policy rate, the US and JP 10yr swap rates became closely linked. That link was broken when the BoJ surprisingly expanded the tolerable band for the 10yr JGB yield under YCC, but it has been restored by the management failure at a couple US banks. With concerns about a financial crisis remaining, we think a 10yr TONA swap rate of about 60bp to be a fair level.



Front end – US

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This is a summary of <u>Funding notes: money map & Fed facilities 3 Mar</u> 2023

Liquidity system is working: from haves to have nots

The financial system has recently worked to provide funding liquidity from haves to have nots. We see this in at last two ways: (1) Fed balance sheet data (2) FHLB & MMF flows.

Fed balance sheet: Fed B/S grew \$300bn w/w in most recent data, largely due to DW (+\$148b), FDIC programs (\$+143b), & BTFP (\$12b). Cash at banks (reserves) grew an even larger \$441b. The \$143b in excess bank cash growth is because lower ON RRP (-\$137b) (Exhibit 21). Fed B/S growth & ON RRP drop provided needed banking system cash.

FHLB & MMF flows: FHLBs have been the primary conduit to shift funds out of ON RRP & needed banks. We track daily FHLB issuance (BofA trading desk numbers), MMF flows (Crane), & changes in Fed ON RRP (Exhibit 22). This shows a virtually closed loop in the past week: FHLBs issue debt to provide needy banks liquidity, it is funded by ON RRP & MMF inflows. For more FHLB detail, see report: FHLB lender of 2nd-to-last resort.

Takeaways: the money flow from Fed B/S & FHLBs is both encouraging & concerning. Encouraging = the financial system, via Fed B/S & FHLBs, can quick move funding to needy banks. Concerning = banks needed a very large amount of additional funding via Fed facilities & FHLBs; this clearly shows a banking system under stress.

We have long argued the financial system has ample liquidity & banks must compete more aggressively for funds. We under-appreciated how challenged small banks might be in an environment of more aggressive funding competition. We will likely now see: more funding competition => bank stress => tighter lending conditions => slower growth.

Discount window versus BTFP: wider collateral main driver

Late last week we received numerous questions on DW vs BTFP. Greater use of DW vs BTFP is most likely due to wider range of eligible collateral. DW & BTFP differences:

Collateral: DW = wide range of eligible collateral, incl IG securities & loans. BTFP = narrow range, limited to Fed OMO-collateral (e.g. USTs, agency MBS / debt, etc)

Valuation & haircut: DW = market value, BTFP = par. Haircut schedule for OMO collateral is now same at DW & BTFP, DW haircuts unchanged for other eligible collateral.

Term: DW = up to 90D. BTFP = up to 1Y without pre-pay fee.

Rate: DW = top of Fed target range. BTFP = 1Y OIS + 10bps.

Stigma: similar at DW & BTFP, according to our bank clients.

Takeaway: BTFP has better terms vs DW, esp with recent 1Y OIS decline. DW > BTFP use most likely because wider range of collateral. Banks can likely fund USTs & agency paper in market or via FHLBs. Banks likely need Fed to fund less liquid / higher risk collateral.

Fed borrowers: mostly SF, heavy NY, other regions too

The Fed discloses limited real-time information about its borrowers. The Fed only shows which regional reserve banks facilitated the borrowing. Specific names will not be



disclosed for years; disclosure period: DW = 2Y after borrow; BTFP = 1Y after facility close. Note: weekly Fed borrowing reporting is combined across DW, BTFP, FDIC facilities, other lending activity.

Here is what we know about Fed borrowers last week:

First Republic (FRC): FRC publicly disclosed its Fed borrowing activity. Specifically, it stated: "From March 10 to March 15, 2023, Bank borrowings from the Federal Reserve varied from \$20 billion to \$109 billion at an overnight rate of 4.75%". This means there is between \$39-\$128b of DW borrowing not explained by FRC. We find both values quite high & concerning given stigma.

Regional activity: Fed borrowing was most concentrated in SF (+233b) & NY (\$55b) (Exhibit 23). This is not a surprise given the FDIC facility & FDIC receivership for banks in those regions.

There were also \$1-2b increases in other regions including Philadelphia, Kansas City, and St. Louis. This suggests a reasonable amount of stress from a wider range of banks.

Bottom line: two points: (1) recent Fed & FHLB data show funding is effectively moving across the banking system, but it also shows acute bank stress across regions (2) DW > BTFP use likely due to wider range of eligible collateral. Going forward, we expect to see near-term bank funding stress, which will tighten lending & likely slow growth.

Exhibit 21: Fed balance sheet, selected assets & liabilities (\$bn, Wednesday comparison data)

Cash in banking system exceeded Fed balance sheet growth due to lower ON RRP

	Assets							Liabilities					
Dates	Securities Re	ро	Discount Window	BTFP	FDIC bank	credit extension	CB Liquidity Swaps	Currency	Foreign RRP	ON RRP	TGA	Reserves	Total
3/8/2023	7,948	-	5	-		-	0	2,308	367	2,193	311	3,004	8,392
3/15/2023	7,940	-	153	12		143	0	2,311	367	2,056	278	3,444	8,689
WoW Change	(8)	-	148	12		143	0	3	0	(137)	(33)	441	298

Source: BofA Global Research, Federal Reserve

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Exhibit 22: Data on FHLB issuance + ON RRP / MMF flows (\$bn)

FHLB net issuance is offset by ON RRP decline & MMF inflows; funding markets are working

FHLBs Net Issuance	13-Mar 156.48	14-Mar 66.28	15-Mar 8.03	16-Mar 18.88	17-Mar 6.11
Money Markets					
ON RRP Total	2127.00	2043.00	2056.00	2066.32	2106.17
ON RRP Change (d/d)	-62.00	-84.00	13.00	10.32	39.85
MMF Flows	37.00	48.00	11.6	37.277	
MMF Inflow - RRP Change	99.00	132.00	-1.40	26.96	
FHLB - MM Flow (Net)	57.48	-65.72	9.43	-8.08	

Source: BofA Global Research, Bloomberg, Crane

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Exhibit 23: Statement of Condition of Each Federal Reserve Bank

Borrowing was sharpest in SF & NY, other regions saw growth in borrowing

	Boston	New York	Philadelphia	Cleveland	Richmond	Atlanta	Chicago	St. Louis	Minneapolis	Kansas City	Dallas	San Francisco	Total
3/15/2023	165	4,276	191	331	574	538	563	131	62	131	422	1,153	8,537
1w Chg	0) 55	2	(0)	1	(1)	(0)	1	0	2	0	233	294
% Chg	0.0%	1.3%	1.1%	-0.1%	0.1%	-0.1%	0.0%	1.1%	0.1%	1.5%	0.1%	25.3%	3.6%
% Total	1.9%	50.1%	2.2%	3.9%	6.7%	6.3%	6.6%	1.5%	0.7%	1.5%	4.9%	13.5%	100.0%

Source: BofA Global Research, Fed H.4.1



Volatility - US

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- Volatility pulled back from crisis levels highs, but the grid topography continues to reflect a significant level of near-term uncertainty.
- The persistent richness of left vs the right side vol, in particular, seems at odds with a Fed now on hold. We favor short 6m1y vs 6m10y vega weighted straddles.

Crisis averted...

Volatility pulled back from crisis levels highs (see March Madness) this week:

- The MOVE index (average of 1m options on 2y, 5y, 10y, and 30y USTs with weights 0.2/0.2/0.4/0.2) collapsed 57bp from the highs to c.140bp currently (see Exhibit 24)
- 1y10y vol is back around the middle of the 110-120bp expected range (Exhibit 25 and Embracing the Pivot), so fair in that context; and
- 1y1y vol is back to 170bp, c.30-40bp lower than peak crisis highs above 200bp.



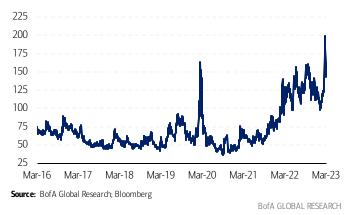


Exhibit 25: 1y10y around middle of the c.100-120bp expected range 1y10y volatility looks fair in this context



The move lower in volatility has been driven by:

- Fading risk sentiment as concerns around systemic drivers for the recent banking stress abated, while the market seems to be pricing the policy measures implemented as capping the potential for further contagion
- The Fed pivot into an on-hold stance, and expectations ahead of the meeting for such move. Indeed, the market is essentially pricing an on-hold Fed at this point, and a high threshold to push the Fed back into hiking (see Exhibit 26).

For context, 1m SOFR options with expiries after the May FOMC meeting are pricing 65% probability of an on-hold or easing Fed at the May meeting (28% for a cut, and 37% for on-hold), and only 35% probability of a hike. The fed funds futures market is pricing a full rate cut by September.

Indeed, a crisis may have been averted, but not without implications for the outlook. There was a clear shift in the medium-term outlook reflecting frontloaded risks for a recession and higher hard-landing probabilities (see 10yT fair value and up/down scenarios), driven by the potential impact of the crisis on tighter bank lending standards (see Estimating downside risk from a sharp tightening in bank lending standards), consumer sentiment, and investors retrenchment in a Minsky moment sort of dynamic.



Despite the downward momentum in volatility, the grid topography continues to reflect a significant level of near-term uncertainty:

- The term structure of volatility is still inverted 1m10y vs 1y10y vol spread c.-25bp currently from c.-50bp at the recent crisis peak (see Exhibit 27). Levels in the 0-10bp are generally seen as reflecting a heathy term structure where systematic short gamma flows start to play a role... we are far from such a context.
- The left side of the grid continues to trade rich to the right side 1y1y vs 1y10y vol spread c.-55bp currently from c.-80bp at the recent crisis peak (see Exhibit 28). This extreme richness of the left side vs the right side seems to be at odds with a Fed now on hold, which generally implies left side vol levels closer to flat vs the right.

To some extent this richness is supported by the potential for another Fed policy shift near-term, towards easing (as we noted above, a rate cut is priced by September). However: (1) even in this context the current level of inversion seems to be excessive; (2) our economists continue to expect rate cuts only in 1Q24.

Exhibit 26: Residual pricing for Fed tightening Fed pivot priced now at 0-1 m horizon

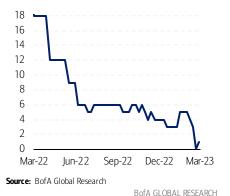
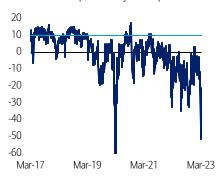


Exhibit 27: 1m10y vs 1y10y vol spread ... reached c.-50bp, currently c.-25bp



Source: BofA Global Research; Bloomberg

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Exhibit 28: 1y1y vs 1y10y vol spread



Source: BofA Global Research; Bloomberg

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Trade recommendations

We argued recently that contexts of high uncertain and volatility support a bias towards positions where investors pay a premium but limit or eliminate all together the exposure to downside scenarios terminally beyond the upfront premium. Receiver spreads (which we recommend recently in reacceleration, resilience & volatility as a way to fade reacceleration expectations) and 2s10s curve caps (see UST curve nearing inflection with slowdown risks), continue to make sense in this context. Long dated vega exposures (which was one of the themes of our vol outlook for '23 – see Embracing the Pivot) has also to a large extent fulfilled its role as a macro hedge in portfolios.

We continue to like these positions, but the recent fading of risk sentiment and volatility starts to justify more directional positions. We favor:

6m10y costless payer ladders (currently -4bp, see <u>Too fast too soon</u>) to position for scenarios where data may stay supported near-term, but where there is also limited scope for rates to underperform the forwards beyond the downside breakeven on the trade (currently c.3.97% for 10y SOFR levels terminally, around the peak cycle yields reached in October '22). The main risk on the position is a selloff beyond the downside breakeven with potentially unlimited downside.

Short left vs right side vol through 6m1y vs 6m10y vega weighted straddles, receiving c.72bp of vega on the position (indicative). The trade fades the persistent richness of the left side of the grid vs the right, which we think is at odds with the recent shift in Fed policy towards an on-hold stance. The risk on the position is a shift in Fed policy stance (more hikes or cuts) near term, with potentially unlimited downside. The position needs to be managed for delta exposures.

Inflation - US

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- Long end real yields a buy on recession concerns and inflation uncertainty
- 5y5y B/E historically insulated from credit tightening; B/E curve biased steeper if upcoming recession

Forecast revisions for lower real yields

Alongside the sharp bull steepening of the nominal rates curve in recent weeks, the inflation curve reflects lower inflation compensation over the next 2 years. While fading the move lower in inflation breakevens (B/Es) may be tempting given attractive carry environment and potentially lagged impact of banking sector tightening on inflation data, we view risks at the front-end as more two-sided. Instead, we think that longer-dated breakeven forwards may be attractive given the Fed's shift in reaction function and still strong inflation expected in coming months. We retain our long recommendation in 30y TIPS and acknowledge a shift in our thinking in curve dynamics.

In <u>US Macro</u>, we discussed revisions lower to our nominal rates forecasts. The adjustments are primarily centered on lower 2y; we hold our end '23 10y forecast but lower the path. In Exhibit 29 we show the corresponding adjustments to B/E and real rates. We maintain our views across the breakeven curve and adjust expected real yields lower.

Exhibit 29: Forecasts through end of the year across nominal, breakeven, and real yields

Revision lower in front-end nominals driven by lower real rates

	_	New				Old			Change		
		2Q23	3Q23	4Q23	2Q23	3Q23	4Q23	2Q23	3Q23	4Q23	
	2y Govt	4.00	3.75	3.50	4.50	4.15	3.75	-0.50	-0.40	-0.25	
	5y Govt	3.60	3.45	3.40	4.05	3.80	3.50	-0.45	-0.35	-0.10	
	10y Govt	3.50	3.35	3.25	3.75	3.50	3.25	-0.25	-0.15	0.00	
Nominal	30y Govt	3.70	3.55	3.40	3.85	3.65	3.40	-0.15	-0.10	0.00	
	2y Govt	2.75	2.70	2.70	2.75	2.70	2.70	0.00	0.00	0.00	
	5y Govt	2.50	2.50	2.40	2.50	2.50	2.40	0.00	0.00	0.00	
Breakeve	10y Govt	2.40	2.40	2.40	2.40	2.40	2.40	0.00	0.00	0.00	
n	30y Govt	2.40	2.40	2.40	2.40	2.40	2.40	0.00	0.00	0.00	
	2y Govt	1.25	1.05	0.80	1.75	1.45	1.05	-0.50	-0.40	-0.25	
	5y Govt	1.10	0.95	1.00	1.55	1.30	1.10	-0.45	-0.35	-0.10	
	10y Govt	1.10	0.95	0.85	1.35	1.10	0.85	-0.25	-0.15	0.00	
Real	30y Govt	1.30	1.15	1.00	1.45	1.25	1.00	-0.15	-0.10	0.00	

Source: BofA Global Research

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Longer dated forward BEs likely more supported

Still strong inflation data expected near term may open the door for higher inflation term-premium given the Fed's shift in reaction function. In our view this may also support a steeper nominal curve.

The Fed's SEP (Summary of Economic Projections) which reflects an unchanged terminal rate alongside higher inflation and lower unemployment expectations suggests the Fed is not just responding to the data under their feet but also to the expected tightening from the banking sector already in the pipeline.

A Fed that delivers fewer hikes on still strong data with an eye towards an uncertain degree of tightening from the lending channel, may open the door to higher 5y5y inflation breakevens, which remain very well anchored around the Fed's 2% PCE target (2.3% CPI, assuming a 30bps wedge).



As shown in Exhibit 30, inflation term premium tends to increase when the nominal curve steepens. We also see in Exhibit 31 that when lending standards are tightening, 5y5y breakevens tend to be more insulated. We think that inflation longs are better placed in longer-dated forwards to trade the view for stickier inflation data and a less aggressive Fed.

Exhibit 30: 5y5y breakeven and 2y10y nominal curve

Steeper curve tends to correspond with higher inflation term premium

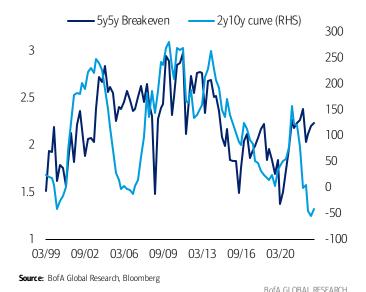
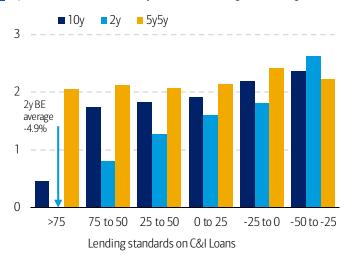


Exhibit 31: Average BE level for given tightening in lending standards (monthly average since 2005)

Spot breakevens are historically lower when lending standards tighten



Source: BofA Global Research, Bloomberg, Federal Reserve

BofA GLOBAL RESEARCH

Real yields at back end remain attractive

Ahead of the unexpected banking sector risk event, we recommended positioning for a flatter real yield curve on the view that either longer-dated real yields were correct in pricing of R* well above the SEP or the Fed was close to ending its hiking cycle (see: R* inconsistency argues for more deeply inverted real yield curve). The latter proved to be true, which endorses our view that longer-dated real yields are a buy, one of our highest conviction macro trades for the 2023 year ahead, see: Rooting for the anti-hero.

With the Fed expecting to end its hiking cycle with a real overnight policy rate of 150bps (5.1% '23 fed funds rate less 3.3% PCE inflation rate less 30bps CPI/ PCE wedge), we think this argues for a much lower real policy rate over the longer term. 30y real yields currently around 145bps, right around the Fed's "restrictive" real policy rate, remains an attractive long position in our view.



Technicals

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- Risk-averse price action has supported our technical signals and patterns favoring an end to the flatter cycle and transition to a steeper one this year.
- US 2s10s capitulated during the week of March 10th signaling the end of a wave 5 wedge pattern and complimenting steeper divergence conditions from oscillators.
- US 5s30s have been double bottoming with two tests of -47bps and now a steeper breakout above the neckline of the pattern.

For more of our rates technical and cross asset views, please see <u>Technical</u>

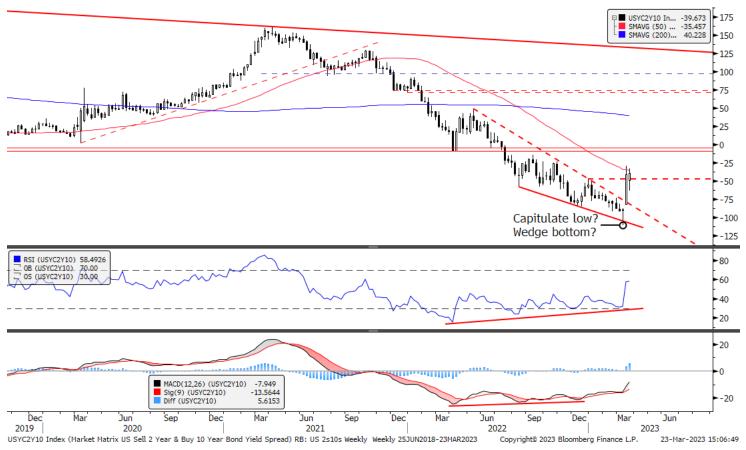
Advantage: Running the gauntlet 20 March 2023

US 2s10s

US 2s10s Steeper: A capitulate doji, divergence & wedge pattern signal steeper

Chart 1: US 2s10s - Weekly Chart (G696)

A capitulate candle, oscillator divergence and wedge pattern breakout say the low for the curve is in for this cycle and to position steeper on dips.



Source: BofA Global Research, Bloomberg

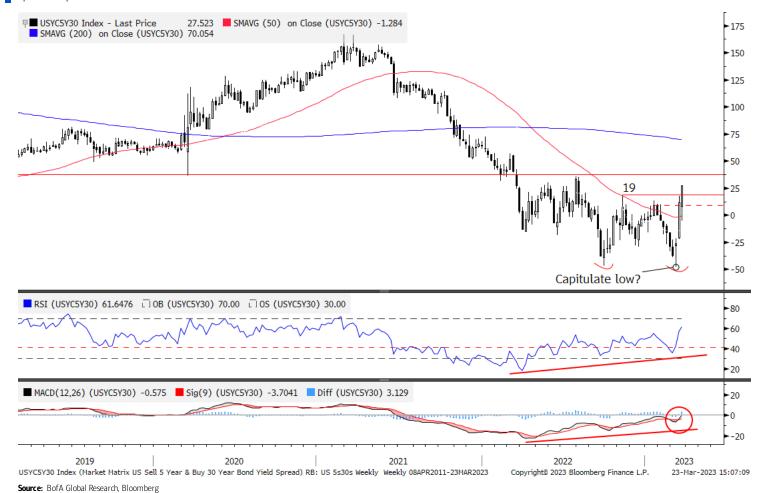


US 5s30s

US 5s30s: Double bottom favors steeper view, at least range bound

Chart 2: US 5s30s - Weekly chart

The capitulate low two weeks ago and impulsive steepening with a MACD cross suggests the flattest point of the curve (-47) is a double bottom. This pattern measures up to +70bps.



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Rates Alpha trade recommendations

Exhibit 32: Global Rates Trade Book - open trades Open trades

	Entry				Latest		
Open Trades	Date	Entry	Target	Stop	Level	Trade rationale	Risk
Short Sep23 Euribor	16-Mar-23	3.23	4.25	2.75	3.50	The market has repriced terminal too low	Contagion in financial system leading to cuts
Long 15y15y USDi/short EURi	24-Feb-23	-32	10	-52	-36	Oppose higher EZ trend inflation	EZ inflation-linked scarcity
<u>BTPei '28/'33'/'51 fly (-</u> <u>39.5%/+100%/-60.5% risk)</u>	6-Dec-22	43	15	58	35	Oppose extreme forward inversion	Pension demand for long-end IL
39.5%/+100%/-60.5% risk) Long 1y fwd 2s5s10s fly Short 1y forward 1y10y vol	20-Nov-22	-15.8	-50	7	-10	The 5y sector to outperform with rally	Eurozone Inflation more persistent
Short 1v forward 1v10v vol	20-Nov-22	111	70	140	102	Short vol view medium term, post ECB tightening	Bear-steepening / surge in delivered vol
Long OAT Feb28 vs SPGB Jan28	20-Nov-22	33.2	60	20	31	Position for Q1 EGB spread widening market	Rates vol declining/aggressive PEPP flexibility
<u>1y15y 1.55% receiver</u>	26-May-22	15	45	0	0.5	Hedging the scenario of an ECB that stops short of neutral rate	Structural paying flows in 10-20y sector
<u>UKTi 2032/36/47 barbell</u>	17-Mar-23	9.5	2.0	14.0	9.6	Anomaly, weighted as forward real curve flattener	Light pension demand for 20y area supply
≤ Sell UKT1e25 v UKT3h45 on ASW	10-Mar-23	129.5	70	160	134	Large volume of short-dated Gilt issuance	Heavy overseas demand for short-dated Gilts
Long UKTi 2068 breakeven	28-Feb-23	340	375	320	328	RV cheapness, convexity	Heavy ultralong linker supply
Sell UKT4e27 v UKT1e28 on ASW	10-Nov-22	1.8	-25	12	-15.3	Retail demand for low coupon Gilts	Benchmark premium for 27s
Long 5y US swap spread	20-Nov-22	-25.3	-15	-32	-16.6	Position for wider US spreads	Risk-off or foreign UST selling
D 20 TIPS TH 2052	20 N 22	1.000/	1.000/	1.000/	1 450/	Higher carry vs market pricing near-term and	T
Buy 30y TIPS: TII 2052	20-Nov-22	1.60%	1.00%	1.90%	1.45%	eventually rally significantly on the turn in cycle we expect in '23	rerminal continues to get priced higher
Buy May '23 SOFR/FF vs Nov '23 SOFR/FF futures	20-Nov-22	5bps	-1bps	8bps	1.5bps	Supply surge post US-debt limit will tighten SOFR-FF basis	Early end to QT, limited bill issuance, debt limit doesn't get resolved until later in '23
1y10y receiver spreads	9-Mar-23	-18bp	32bp	-18bp	8bp	Fading of recent reacceleration expectations	Extension of the cycle and new peak cycle yields
6m2y rtp spd a/a+50 vs rtr a-45	20-Nov-22	0	50bp	-20bp	-17bp	Near term hawkish Fed	Dovish Fed repricing
6m2y payers vs 1y2y payers	20-Nov-22	0	25bp	-20bp	-15bp	Higher terminal, cuts medium term	Tightening cycle extension
2 1v2v receiver ladders	20-Nov-22	0	35bp	-20bp	-9bp	Fed cuts by end '23	More extreme easing cycle
Short 1y1y vs 1y10y vol	20-Nov-22	Rec 23bp of vega		-10bp of vega	-7bp	Underperformance of left vs right side vol	Extension of Fed cycle
Long 5y30y vol vs 2y30y vol	20-Nov-22	Rec 14bp of vega		-10bp of vega	11bp	Vega supported by neutral repricing	Aggressive inflation collapse
18m fwd 2s10s bull flattener	16-Feb-22	0	30	-10	-3bp	Late cycle by end-'22 / early-'23	Bull steepening on Fed cuts
1y fwd 2s10s cap spreads	8-Jul-22	23	50	-50	-10	Bull steepening as Fed pivots	Limited to upfront premium
2v fwd 2s10s cap	8-Jul-22	45	150	-50	10	Steepening as mkt enters new cycle	Limited to upfront premium
1y 2s10s floor contingent > 2y	9-Feb-23	-60	-80	0	-10	Hedge risk of hawkish Fed	Limited to the upfront premium
6m10v payer ladder	3-Feb-23	0	26	-15	0bp	Fading bullish dynamic in rates	Selloff beyond downside breakeven
<u>3y1y receiver ladder</u>	8-Apr-22	0	40	-20	2bp	US economy medium term slowdown	Rally through c.70bp downside b/e o
Receive 2s3s 6s3s	02-Feb-23	0.6	-1.8	2	-0.1	2s3s curve is unusually steep given funding task in 2023, likely to flatten after seasonal Kangaroo flows subside in months ahead	Abundant liquidity means funding markets do not tighten
Cross-Currency 4y-10y-20y fly	16-Dec-22	22	40	15	19.5	Strengthening demand for Kangaroo bonds	Central banks' potential pivot towards lower rates
2s10s AU flattener boxed vs US	20-Nov-22	116.8	0	160	74.8	Inflation prints and central banks in each country are moving in opposite directions	Risk that FX markets will reverse current trends as rising AUD causes AU tradables disinflation

Source: BofA Global Research, Bloomberg



Exhibit 33: Global Rates Trade Book - closed trades Closed trades

	Closed trades	Entry date	Entry level	Target	Stop	Close date	Level closed
	5y5y French inflation short	20-Jan-23	265	220	290	06-Mar-23	290
	Long 10y BTPei BE (target/stop carry-adjusted)	30-Aug-22	232	285	210	06-Mar-23	275
	Sell OTM 6m1y payer to buy USD ATM+20/+70 6m1y payer spread	16-Feb-23	0	20bp	-10bp	02-Mar-23	-13.5
	Long TII 2046/ Short DBRi 2046(real yield spread)	14-Nov-22	209	150	240	24-Feb-23	178
	Long 1y1y EUR rates vol vs US vol	20-Nov-22	-180K	120K	-330K	16-Feb-23	-100K
	Long Jun23 BTF vs €str	21-Oct-22	-42	-80	-25	19-Jan-23	-21
	3m2y risk reversal	20-Nov-22	0	400K	-200K	27-Dec-22	500K
	Pay Sep23 €str 2y fwd 10s30s bull steepener	28-Oct-22 20-Nov-22	2.58 0	3.5 400k	2 -200k	27-Dec-22 1-Dec-22	3.5 -370K
	Short 5y BTP vs 2y, 10y on z-spread	20-110V-22 21-Jul-22	6.8	70	-25	18-Nov-22	16
	Dec22 FRA-OIS widener	28-Oct-22	9	16	5	10-Nov-22	7
	OATei 2031-2040 cash-for cash extension	21-Oct-22	146	90	175	10-Nov-22	88.1
	DBRi '26/'30'/'33 barbell	7-Jan-22	8.2	1	12	10-Nov-22	0
	2yf 20y 3s6s EUR basis widener	9-Aug-22	-9.2	-4.3	-12.5	17-Oct-22	-5.9
	OATei '27/'30'/'40 barbell (+44.8%/-100%/+55.2%)	17-Jun-22	14.4	0	22	13-Oct-22	23
	Long EU 2043 vs OAT 2044	23-Jun-22	7.4	-15	20	13-Oct-22	23.5
	Long US vs EUR 3m10y receiver	30-Aug-22	0	1.7mln	-1mln	12-Oct-22	119k
	Buy OATei 2040 (carry-adjusted)	23-Jun-22	11	-65	50	28-Sep-22	50
	Receive 5y5y EUR real rate	23-Jun-22	46	-30	90	28-Sep-22	90
	2s30s US CPI steepener, 2y fwd, vs EA	12-Jul-22	-55	20	-90	44799	-95
ä	Long US vs EUR 6m10y receiver	4-Aug-22	0	2.5mln	-1.5mln	30-Aug-22	566K
	1y1y vs 5y5y flattener	7-Jul-22	90	30	150	18-Aug-22	30
	Pay Dec-22 € str	23-Jun-22	96.5	130	75	21-Jul-22	111
	Pay 5y5y 3s6s EUR basis	1-Feb-22	2.5	6	0	17-Jun-22	-0.3
	6m30y 1.9% payer	26-May-22	16	45	0	15-Jun-22	50
	2y10y p/s vs 2y10y OTM payer in USD	1-Jun-22	0	600K	-300K	15-Jun-22	-300K
	Short BTPS Mar37 vs DBR May36	29-Apr-22	185	250	150	15-Jun-22	226
	Pay Jul22 ECB €STR	8-Jun-22	-21.5	-10	-28	9-Jun-22	-28
	Pay Sep22 ESTR ECB	2-Jun-22	10	30	0	8-Jun-22	17
	ly ly 1.45/2% payer spread Buy 2y ly ATM payer vs 4y ly ATM+35	26-May-22 31-Mar-22	150K -90K	450K 90K	0K -190K	2-Jun-22 2-Jun-22	260K -75K
	Long €100mln 3m10y ATM receivers	2-Mar-22	-50K 11	30	0	2-Jun-22	0
	1y1y/2y3y Euro inflation flattener	6-May-22	-43.8	-80	-25	1-Jun-22	-77
	Pay 2y30y EUR real rates	18-Mar-22	-149	-60	-200	26-May-22	-57
	5y fwd 2s10s bear steepener	18-Mar-22	0	500K	-250K	28-Apr-22	135K
	Short Mar37 BTP	21-Apr-22	2.75%	3.75%	2.25%	28-Apr-22	2.87%
	BTP 2s10s steepener	18-Mar-22	166	230	130	21-Apr-22	180
	Short 10y Spain (Apr32) on ASW	4-Feb-22	41	70	20	12-Mar-22	20
	18m1y ATM+25/+50 payer spread	18-Mar-22	6.5	19	0	31-Mar-22	10.9
	Jun22-Mar23 FRA-€str flatteners	15-Feb-22	7.7	4.5	9.8	7-Mar-22	1.7
	Long €100mln 3m5y ATM receivers	21-Feb-22	12	35	-5	2-Mar-22	1.35
	UKTi 2047/55/65 barbell (+60%/-100%/+40% risk)	23-Jan-23	1.4	-3.5	4.0	22-Mar-23	-3.3
	Receive March 2023 MPC-dated Sonia	17-Feb-23	4.15	3.90	4.30	13-Mar-23	4.09
	Receive August MPC dated Sonia	13-Jan-23	4.40%	4.10%	4.55%	14-Feb-23	4.55%
	2y3y/5y5y RPI flattener	12-Jan-23	-13.8	-45	5	9-Feb-23	-45
	Long UKT 1.25% 2051 vs. short UKT 1.25% 2027	26-Jan-23	46.90	15	60	44959	60
	Sell UKT 4¼% 32 vs. Sonia	4-Nov-22	-28.5	0	-45	12-Jan-23	-2.7
	1y4y/5y5y RPI flattener	28-Oct-22	-8	-50	20	12-Jan-23	-9
	Receive March 2023 MPC dated Sonia	28-Oct-22	4.47	4	4.7	12-Jan-23	4.28
	Pay 1y4y RPI	8-Sep-22	4.47	380	530	27-Oct-22	375
		8-Sep-22 14-Oct-22					56
¥	Receive UKTI 2034-2040 fwd real yield		209	120	250	20-Oct-22	
	UKTi 2047/56/65 barbell (+31.6%/-100%/+68.4% risk)	16-Sep-22	-2.6	-6	-0.5	29-Sep-22	-6
	Pay 5y5y real Sonia	24-Aug-22	-128	-50	-165	26-Sep-22	-50
	ly forward 1s4s Sonia steepener	8-Sep-22	-68	-25	-85	28-Sep-22	-85
	Long 1y1y UK RPI v US CPI	9-Jun-22	40	100	-10	26-Aug-22	-4
	5y5y/10y20y RPI steepener	28-Jun-22	-68	-20	-95	25-Aug-22	-95
	ly forward 2s5s Sonia steepener	24-Jun-22	-25	25	-50	17-Aug-22	-50
	UKT Jan-23/Jan-25 fwd ASW narrower	20-Apr-22	66	20	90	17-Aug-22	90
	Buy IL24 @-4.56 (terms are carry-adj. bp chgs.)	22-Apr-22	0	-120	60	2-Aug-22	137
	Receive 1y1y real Sonia vs. real SOFR	18-May-22	155	210	120	9-Jun-22	116
	1y fwd 1s5s real Sonia steepener	25-Mar-22	-96	-40	-130	1-Jun-22	-39



Exhibit 33: Global Rates Trade Book - closed trades Closed trades

	Closed trades	Entry date	Entry level	Target	Stop	Close date	Level closed
	Receive 1y1y Sonia vs. paying 1y1y SOFR	12-May-22	70	140	30	19-May-22	49
	Pay 10y5y Sonia and receive 10y5y €str	3-Mar-22	10.6	50	-15	21-Apr-22	-15
	Short UKT 0.125% 2026 Gilt at 0.89% and receive 4y Sonia swap at 1.18%	6-Jan-22	-29	0	-45	24-Feb-22	-45
	GBP 2s5s real swap curve steepener	11-Feb-22	45	80	20	24-Feb-22	98
	Receive December 2022 MPC-dated Sonia and sell UKT 0.125% 2026	31-Jan-22	-42	0	-60	14-Feb-22	-60
	1y5y30y real yield curve flattener	27-Feb-23	-5	-40	+15	23 Mar-23	
	Long Ty US CPI inflation	23-Jan-23	215	250	195	8-Feb-23	243
	3m2y 25bp out risk reversals	20-Nov-22	0	25bp	-20bp	21-Feb-23	4bp
	Ty10y US vs EUR receivers	20-Nov-22	0 (costless)	25bp of delta	-20bp of delta	1-Feb-23	25bp
	Buy 10y UST vs swap and sell 10y GE vs swap	20-Nov-22	-105	-85	-115	17-Jan-22	-88
	Short 1y1y inflation swap	12-Sep-22	3.2	2.75	3.5	29-Sep-22	2.75
	Buy 1y1y payer ladder	7-Apr-22	0	55	-20	9-Fb-23	-20
	6m10y receiver spread	11-Jul-22	16	40	-15	11-Jan-23	0
	Long 10y20y TIPS (+100% 30y, -33% 10y TIPS)	24-May-22	61	15	85	12-Sep-22	85
	Buy 5y SOFR swap spread (long UST vs swap)	2-Aug-22	-25.5	-15	-32	3-Aug-22	24.25bp
NS	Sell 1y1y vs 1y10y vol (vega wtd strds) -	1-Aug-22	-34	30	-15	12-Sep-22	-15
_	Receive Sep FOMC OIS	26-May-22	2.13%	1.96%	2.23%	2-Jun-22	2.23%
	Buy 1y1y payers vs 3y1y payers	14-Mar-22	10	30	-15	4-Aug-22	40bp
	Long 10y TSY	14-Apr-22	2.83	2.25	3.1	5-May-22	3.1
	9m5y receiver spd vs 9m5y OTM payers	26-May-22	0	25	-15	16-Jun-22	-15
	Ty forward 5s30s TIPS flattener	11-Jan-22	47	0	75	4-Apr-22	-6
	ly ly real rate short	24-Mar-22	-44	-15	-60	1-Apr-22	-15
	Ty fwd 2s10s floor	16-Feb-22	-38	12bp	-6bp	4-Aug-22	14bp
	une '23 FF	3-Mar-22	1.84	2.4	1.55	16-Mar-22	2.4
	Sell SOFR/FF Basis	11-Jan-22	4.25	2.5	5.5	7-Mar-22	2
	Buy 2y10y rec spd vs 2y10y pay atm+75bp	18-Jan-22	0	50	-15	7-Apr-22	-15
	Pay April/July OIS	15-Mar-23	5	25	0	17-Mar-23	-30
	Pay 1y1y BOB	16-Feb-23	21	35	14	13-Mar-23	31
	Pay March OIS	07-Feb-23	22	25	11	7-Mar-23	25
	ACGB 2s10s flattener	20-Nov-22	54	0	69	27-Feb-23	23
	Receive July/August OIS	7-Feb-23	1	-15	5	22-Feb-23	8.7
	Pay February/ March OIS	25-Jan-23	16	25	11	7-Feb-23	22.4
	AU 1Y1Y, Receive NZ 1Y1Y	25-Nov-22	122	0	180	26-Jan-23	77
U	Pay June 2023 OIS (AU)	20-Nov-22	3.68%	4.20%	3.50%	20-Jan-23	3.50%
Asiapac	Long JGBi 27	20-Nov-22	-62.3	-77.3	-54.8	20-Dec-22	-54.8
As	10y20y TONA swap flattener	20-Nov-22	46.3	30	54.5	20-Dec-22	36.3
	Long 10-year swap spread	12-Sep-22	19.5	28.5	15	27-Sep-22	28.5
	Paying 20yr TONA swaps	6-Jul-22	83	93	78	25-Jul-22	78
	Pay Aug-22 RBA OIS	3-Jun-22	1.4	1.8	1.2	20-Jul-22	1.89
	20yr JGB long (vs. a matched maturity TONA swap)	2-Jun-22	-5.5	3.5	-10	24-Jun-22	-10
	10yr30yr TONA swap steepeners	4-Apr-22	46	55	41.5	2-Jun-22	55
	Paying belly of 1yr forward 5yr10yr20yr TONA fly	28-Mar-22	-15	0	-22.5	26-Apr-22	-6.1
	Long 10-year swap spread	23-Mar-22	5	15	9	4-Apr-22	15

Source: BofA Global Research, Bloomberg



Global rates forecasts

Exhibit 34: Latest levels and rate forecastsForecasts by quarter up to Q2 2024 plus 2024 year-end

		Latest	Q2 23	Q3 23	Q4 23	Q1 24	Q2 24	YE 24
USA	O/N SOFR	4.55	5.06	5.06	5.07	4.82	4.32	3.32
	2y T-Note	3.81	4.00	3.75	3.50	3.25	3.00	2.75
	5y T-Note	3.41	3.60	3.45	3.40	3.25	3.10	3.00
	10y T-Note	3.40	3.50	3.35	3.25	3.25	3.25	3.25
	30y T-Bond	3.68	3.70	3.55	3.40	3.40	3.45	3.50
	2y Swap	4.12	4.05	3.80	3.45	3.20	2.95	2.75
	5y Swap	3.50	3.45	3.35	3.30	3.15	3.00	2.90
	10y Swap	3.40	3.25	3.15	3.05	3.05	3.05	3.05
Germany	3m Euribor	2.99	3.90	4.00	4.10			3.40
	2y BKO	2.53	3.20	3.10	2.85			2.00
	5y OBL	2.20	2.75	2.50	2.15			2.00
	10y DBR	2.20	2.75	2.50	2.25			2.25
	30y DBR	2.25	2.60	2.50	2.50			2.50
	2y Euribor Swap	3.30	3.85	3.75	3.50			2.50
	5y Euribor Swap	2.98	3.40	3.10	2.75			2.40
	10y Euribor Swap	2.90	3.35	3.05	2.75			2.65
Japan	3m Libor	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	0.02
	2y JGB	-0.05	0.05	0.05	0.05	0.05	0.05	0.25
	5y JGB	0.08	0.25	0.25	0.25	0.25	0.25	0.40
	10y JGB	0.29	0.50	0.50	0.50	0.50	0.50	0.70
	30y JGB	1.33	1.70	1.70	1.70	1.70	1.70	1.80
	2y Swap	0.11	0.30	0.30	0.30	0.30	0.30	0.40
	5y Swap	0.24	0.65	0.65	0.65	0.65	0.65	0.75
	10y Swap	0.58	1.00	1.00	1.00	1.00	1.00	1.10
U.K.	3m Sonia	4.26	4.25	4.25	4.00			3.75
	2y UKT	3.30	3.50	3.50	3.25			3.00
	5y UKT	3.22	3.75	3.75	3.75			3.50
	10y UKT	3.36	3.75	3.75	3.75			3.75
	BOy UKT	3.83	4.00	4.00	4.00			4.00
	2y Sonia Swap	4.10	3.75	3.75	3.50			3.25
	5y Sonia Swap	3.61	3.75	3.75	3.75			3.50
	10y Sonia Swap	3.32	3.50	3.50	3.50			3.50
Australia	3m BBSW	3.70	4.40	4.40	4.40			4.30
	2y ACGB	2.89	3.90	3.90	3.90			3.80
	5y ACGB	2.99	4.10	3.80	3.80			3.70
	10y ACGB	3.25	4.00	3.90	3.80			3.60
	By Swap	3.33	4.10	4.10	4.10			3.90
	10y Swap	3.86	4.30	4.30	4.20			3.80
Canada	2y Govt	3.44	3.90	3.75	3.50			2.90
	5y Govt	2.77	3.25	3.20	3.15			2.90
	10y Govt	2.75	3.25	3.20	3.20			3.10
	2y Swap	3.91	4.40	4.25	4.00			3.40
	5y Swap	3.13	3.60	3.50	3.45			3.20
	10y Swap	3.14	3.65	3.60	3.60			3.50

Source: BofA Global Research. US swaps vs overnight Sofr, EUR swaps vs 6M Euribor, Japan swaps vs Tona, GBP swaps vs Sonia, AUD swaps vs BBSW, CAD swaps vs 3M BAs



Acronyms

Exhibit 35: Common acronyms/abbreviationsThis list is subject to change

Acronym/Abbreviation	Definition	Acronym/Abbreviation	Definition
1H	First Half	Jan	January
2H	Second Half	Jul	July
1Q/Q1	First Quarter	Jun	June
2Q / Q2	Second Quarter	lhs	left-hand side
3Q / Q3	Third Quarter	m	month
4Q / Q4	Fourth Quarter	MA	Moving Average
ann	annualized	Mar	March
APP	Asset Purchase Programme	MACD	Moving average convergence/divergence
		MBM	
Apr	April		Meeting-by-meeting
AS	Austria	mom	month-on-month Monday
Aug	August	Mon	· · · · J
BdF	Banque de France (Bank of France)	MPC	Monetary Policy Committee
BE	Belgium	MWh	Megawatt-hour
BEA	Bureau of Economic Analysis	NGEU	NextGenerationEU
BLS	Bank Lending Survey	NE	Netherlands
BoE	Bank of England	Nov	November
BofA	Bank of America	NRRP	National Recovery and Resilience Plan
Bol	Banca d'Italia (Bank of Italy)	NSA	Non-seasonally Adjusted
ВоЈ	Bank of Japan	OAT	Obligations assimilables du Trésor
BoS	Banco de España (Bank of Spain)	OBR	Office for Budget Responsibility
bp	basis point	Oct	October
BTP	Buoni Poliennali del Tesoro	OECD	Organisation for Economic Co-operation and Development
Buba	Bundesbank	ONS	Office for National Statistics
С	circa	р	preliminary/flash print
CA	Current Account	PBoC	People's Bank of China
CPI	Consumer Price Index	PEPP	Pandemic Emergency Purchase Programme
CSPP	Corporate Sector Purchase Programme	PMI	Purchasing Managers' Index
d	day	PSPP	Public Sector Purchase Programme
GE	Germany	PT	Portugal
Dec	December	OE	Quantitative Easing
DS	Debt sustainability		quarter-on-quarter
DXY	US Dollar Index	qoq	
		QT	Quantitative Tightening
EA	Euro area	RBA	Reserve Bank of Australia
EC	European Commission	RBNZ	Reserve Bank of New Zealand
ECB	European Central Bank	rhs	right-hand side
ECJ	European Court of Justice	RPI	Retail Price Index
EFSF	European Financial Stability Facility	RRF	Recovery and Resilience Facility
EGB	European Government Bond	RSI	Relative Strength Index
EIB	European Investment Bank	SA	Seasonally Adjusted
EMOT	Economic Mood Tracker	SAFE	Survey on the access to finance of enterprises
EP	European Parliament	Sat	Saturday
SP	Spain	Sep	September
ESI	Economic Sentiment Indicator	SMA	Survey of Monetary Analysts / Simple moving average
ESM	European Stability Mechanism	SNB	Swiss National Bank
EU	European Union	SPF	Survey of Professional Forecasters
f	final print	Sun	Sunday
Feb	February	SURE	Support to mitigate Unemployment Risks in an Emergency
Fed	Federal Reserve	S&P	Standard & Poor's
FR	France	Thu	Thursday
Fri	Friday	TLTRO	Targeted Longer-term Refinancing Operations
GC	Governing Council	TPI	Transmission Protection Instrument
GDP	Gross Domestic Product	TTF	Title Transfer Facility
GNI	Gross National Income	Tue	Tuesday
		1	
GR	Greece	UK	United Kingdom
HICP	Harmonised Index of Consumer Prices	US	United States
HMT	His Majesty's Treasury	UST	US Treasury yield
IMF	International Monetary Fund	WDA	Work-day Adjusted
INSEE	National Institute of Statistics and Economic Studies	Wed	Wednesday
IP	Industrial Production	У	year
IR	Ireland	yoy	year-on-year
PCA	Principal Component Analysis	ytd	year-to-date
IG	Investment Grade	DV01	Dollar value of a one basis point change in yield
IT	Italy	WAM	Weighted Average Maturity

Source: BofA Global Research



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