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Global Macro Strategist

Don't Stop Receivin'

Hold on to that bullish feelin'. Some weeks'll win, some'll lose. Bond bears are born to sing the blues. 2024 likely won't be a repeat of 2023 for the global rates markets. Easing is on the way; the pace and eventual rationale matters more than the exact timing. Stay long duration; neutral on USD.

Global Macro Strategy

We discuss how our perspective on tactical positioning in bond market duration differs today vs. February 2023. We don't believe the January 2024 nonfarm payroll report changed the game like the January 2023 report did. We also discuss why "when" Fed easing starts is less important for the USD than "how fast", "how deep", and "why".

Interest Rate Strategy

We stay long duration in the US via long 5y USTs. We close EUR 2y1y vs. 1y1y and maintain pay Apr ECB OIS meeting, and EUR 5y5 vs 20y5y steepener. In cash, we keep our structural short 10y BTP versus Bund and 10s30s OAT ASW box. We maintain receive May'24 MPC and long UKT 1T37 vs. short UKT 1T57, and we also keep our short 15y ASW. We maintain receiving 2y OIS and sell 30y JGB ASW, but close receive 10y OIS vs. sell 30y JGBs.

Currency & Foreign Exchange

The pace of cuts and terminal rate matter more for currencies than the timing of the first cut. Stay short EUR/JPY to benefit from lower rates and increasing use of EUR as a funding currency. We explain why over the past month the USD has risen less than what might have been expected from what yield differentials imply. We discuss which G10 BoP dynamics still deviate from recent historical trends and what the FX implications might be. We also discuss why it is too early to trade the US election. We take a closer look at the interplay between realized and implied volatility of FX markets, ultimately concluding that volatility is cheap.

Inflation-Linked Bonds

We discuss the weakness in breakevens amid declining oil prices, cooling wages, and pushed-back timing of rate cuts. We preview upcoming JGBi linker auction on February 5.

Short-Duration Strategy

We enter short 2y swap spreads given tighter funding conditions ahead.

Interest Rate Derivatives

Short expiry vols rose this week, signalling increased uncertainty around near-term monetary policy. Expiry term structures flattened accordingly, providing potentially attractive entry points for long-election vol trades. We examine USH4 basis optionality relative to receiver swaptions.

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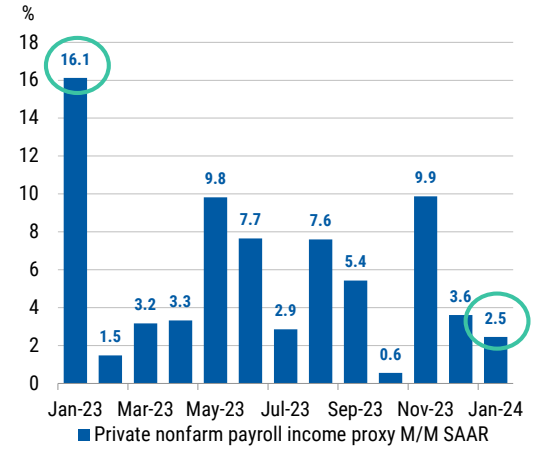
The Perfect Head-fake To Fade

For those thinking the January 2024 nonfarm payroll report looked like the January 2023 report – or think it might lead to the same macro market price action – think again. The amount of income generated by the labor market this January fell substantially below that of last January (see Exhibit 1).

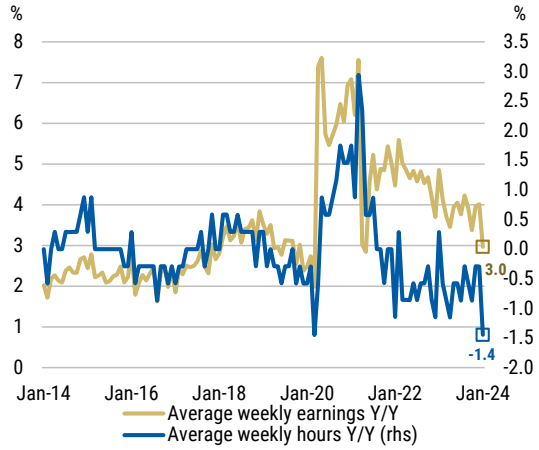
We see this as reason enough to advise investors differently than we did in early February 2023. Back then, we suggested investors move to a neutral stance on duration from long. We feared that such strength in the income proxy would lead to strength in retail sales. And our fears realized shortly thereafter, as retail sales beat expectations handily.

Exhibit 1: US private nonfarm payrolls income proxy M/M SAAR



Source: Morgan Stanley Research, BLS, U.S. Census Bureau, Bloomberg

Exhibit 2: Average weekly earnings vs. average weekly hours Y/Y: private employees

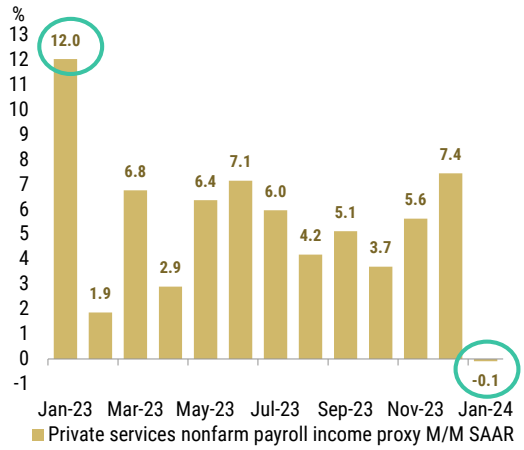


Source: Morgan Stanley Research, BEA, BLS, Bloomberg

Why don't we feel similarly worried about retail sales? Hours worked and weekly earnings both came in well below those in January 2023 (see Exhibit 2) – weighing on income generated by the labor market for both services and goods employment (see Exhibit 3 and Exhibit 4).

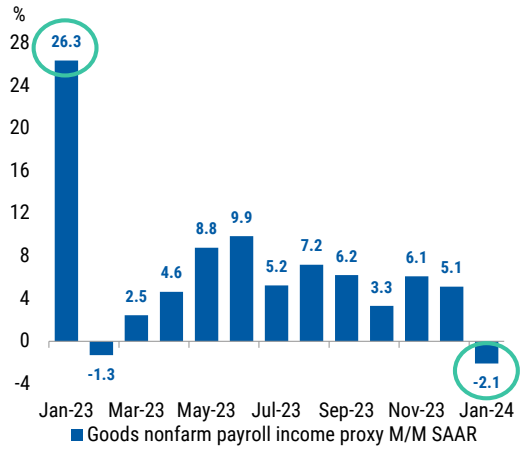
What happened to the weather effect? On the surface, our fears about the effect of a frigid January seem misplaced in retrospect. But we see the very large decline in hours worked as proof that a very cold January affected the labor market indeed. As we flagged in Cold As Ice Ice Baby, a very warm January 2023 resulted in a jump in hours worked. In January 2024, hours worked plummeted.

Exhibit 3: US private services nonfarm payrolls income proxy M/M SAAR



Source: Morgan Stanley Research, BLS, Bloomberg

Exhibit 4: US private goods nonfarm payrolls income proxy M/M SAAR



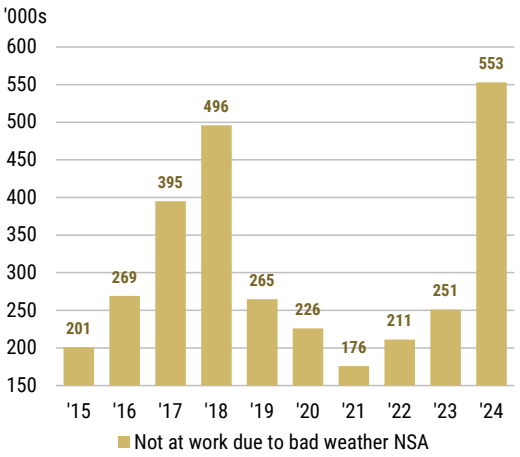
Source: Morgan Stanley Research, BLS, Bloomberg

The household survey measure of employment also showed the effects of the colder-than-usual January. Over 500,000 people were not at work due to bad weather – the most in any January over the past decade (see Exhibit 5).

The weather-induced absence of employees didn't weigh on household survey employment, though. The Bureau of Labor Statistics (BLS) still counts them as employed.

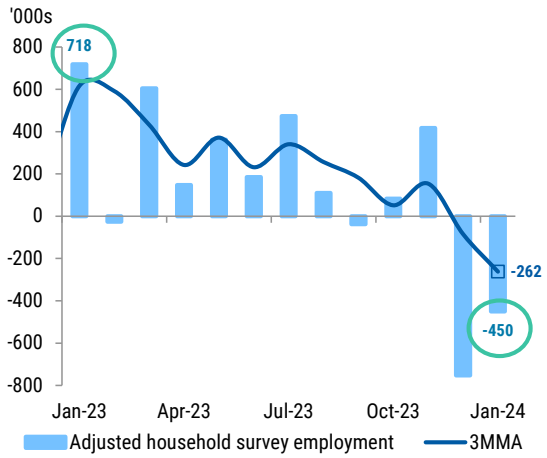
Nevertheless, the household survey measure that gets adjusted to match the methodology of the establishment survey showed that jobs were shed in January (see Exhibit 6). This perspective also suggests quite a difference in the labor market between January 2023 and January 2024.

Exhibit 5: US persons not at work due to bad weather: January over the past decade



Source: Morgan Stanley Research, BLS, Bloomberg

Exhibit 6: Adjusted household survey of employment and 3-month moving average



Source: Morgan Stanley Research, BLS, Bloomberg

Of course, the weather across the US won't stay cold forever, and may not remain colder-than-normal in February. Hours worked will bounce back, eventually. Whether that combines with even more employment growth and higher hourly earnings remains an unknown.

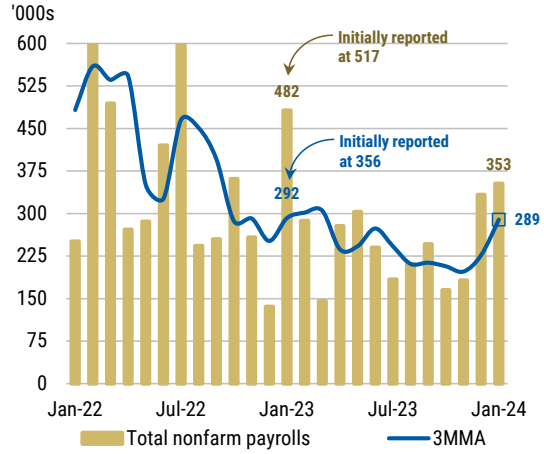
For now, we don't think the January employment report merits the same abandoning of the long duration position that the report a year ago did. The seasonal adjustment and revision process from the BLS should not lend confidence to any read of the initially reported data.

The BLS subsequently revised lower the initially reported total nonfarm payroll numbers from the January 2023 report over the year. And given the odd counter-trend inflection higher in payroll growth over December 2023 and January 2024, it seems reasonable to assume the BLS will similarly revise downward the data again.

We also need to bear in mind a significantly smaller fiscal impulse expected in the US in 2024 vs. 2023. Recent legislation moving through the US Congress, the Bipartisan Tax Bill, bears watching. But we don't see as a concern the potential effect on the FY24 deficit.

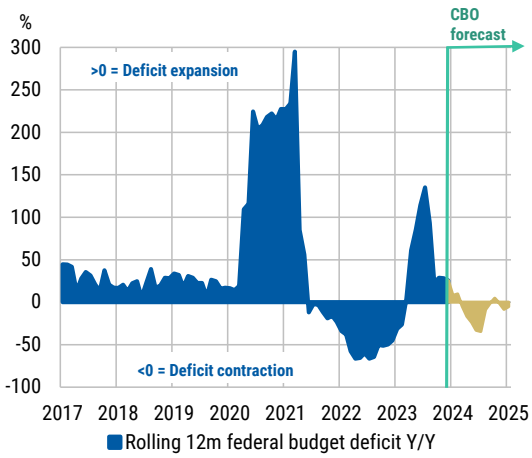
The $117bn increase in the deficit our economists estimate would raise the expected FY24 deficit by roughly 40bp as a % of GDP, but still leave it similar to the FY23 deficit. As such, we would still expect a negative fiscal impulse to hit the economy in 1H24 before reverting to a neutral impulse for the calendar year as a whole (see Exhibit 8).

Exhibit 7: US Establishment survey employment M/M change and 3-month moving average



Source: Morgan Stanley Research, BLS, Bloomberg

Exhibit 8: US federal budget deficit 12m rolling sum, Y/Y, and CBO-based projection with Bipartisan Tax Bill



Source: Morgan Stanley Research, Bloomberg

This perspective on the official budget deficit is less useful than monitoring the cash flows associated with the deficit itself. The forecast for the deficit from an accounting perspective and the realization of that deficit from a cash flow perspective can differ substantially – and therefore may impact activity differently over the course of the year.

The first month of 2024 saw a 38% reduction in the Treasury's financing need versus January 2023 (see Exhibit 9). This reduced "spending" by the Treasury didn't seem to negatively affect the labor market, at least not enough to overcome the extreme seasonal factor boosting payrolls. Still, a continuation of this type of fiscal restraint should eventually increase downside risks to activity, we think.

Exhibit 9: US Treasury financing need, 1H/2H monthly sum, calculated from the Daily Treasury Statement*

2024 vs. last year		-38%											
2H24 vs. last year		15%											
1H24 vs. last year		-28%											
Year	**Half of month**	**Jan $bn**	**Feb $bn**	**Mar $bn**	**Apr $bn**	**May $bn**	**Jun $bn**	**Jul $bn**	**Aug $bn**	**Sep $bn**	**Oct $bn**	**Nov $bn**	**Dec $bn**
2024	**2H**	-41											
	1H	83											
2023	**2H**	-48	84	171	-231	100	131	76	84	87	19	95	23
	1H	116	224	166	-4	210	74	76	216	74	55	247	67
2022	**2H**	-68	84	73	-246	112	-9	50	71	67	39	72	6
	1H	60	164	137	-58	9	85	156	198	-14	50	202	66
2021	**2H**	25	149	355	97	104	48	172	179	17	47	82	-57
	1H	39	158	167	123	55	194	180	159	70	143	202	103
2020	**2H**	7	193	34	285	112	157	30	135	22	116	117	196
	1H	31	52	53	423	315	244	31	105	86	134	109	108
2019	**2H**	-21	109	36	-142	95	-60	36	78	-65	33	69	-33
	1H	21	154	90	-5	155	19	88	144	16	82	137	26

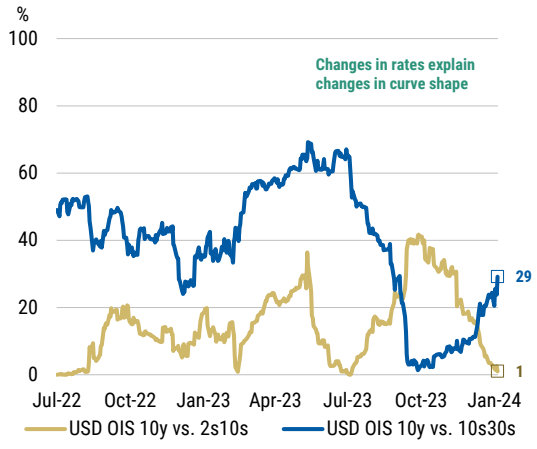
Source: Morgan Stanley Research, US Treasury

Where does all that leave us on duration? We maintain our suggestion to be long duration and buy more on dips, like the one we saw on Friday after payrolls. Why duration over curve? Two reasons primarily:

1. We thought investors favored positioning in yield curve steepeners, and we wanted to avoid their crowded nature.
2. We recognized that movements in duration (yields up, yields down) didn't explain changes in yield curve shape (see Exhibit 10).

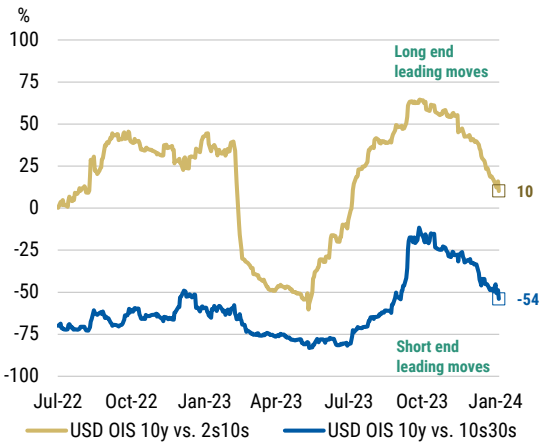
Investors that want to favor yield curve trades as a way to play for lower yields should choose steepeners further out the yield curve, e.g., 10s30s steepeners, instead of those further in the curve like 2s10s (see Exhibit 11).

Exhibit 10: Rolling 63-day R-squared on daily changes in USD OIS rates vs. related USD OIS curve



Source: Morgan Stanley Research, Bloomberg

Exhibit 11: Rolling 63-day correlation on daily changes in USD OIS 10y rates vs. 2s10s and 10s30s curves



Source: Morgan Stanley Research, Bloomberg

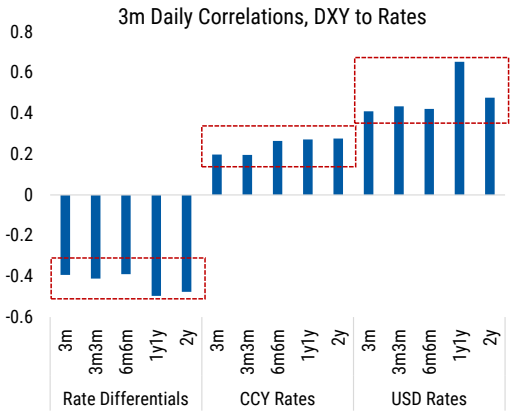
A Journey Through Pace-Time for the USD

When are central banks beginning their cuts? 'Who cares.' 'When' cutting starts is less important than 'how fast', 'how deep', and 'why' they're cutting. See more here: G10 | Warping the pace-time continuum

Currencies are impacted similarly by different parts of the front-end of the yield curve (Exhibit 12). This means it's less about precisely what pushes rates lower (the timing of the cut, the pace of cuts, the terminal rate) - it's about what gets rates generally the lowest.

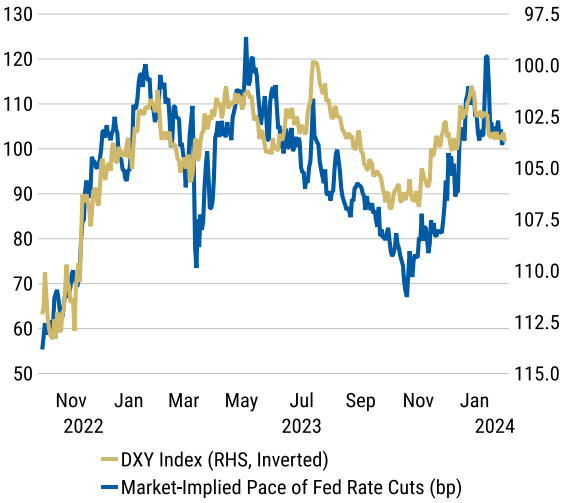
And 2y rates are generally more sensitive to changes in the pace of cuts and terminal rate rather than the timing of the first cut. This is why the USD, for example, has been so sensitive to the market-implied pace of rate cuts from the Fed (Exhibit 13).

Exhibit 12: Currencies are generally equally sensitive to different parts of the front-end of the yield curve



Source: Bloomberg, Morgan Stanley Research

Exhibit 13: The USD has been trading closely to the market-implied pace of cuts from the Fed



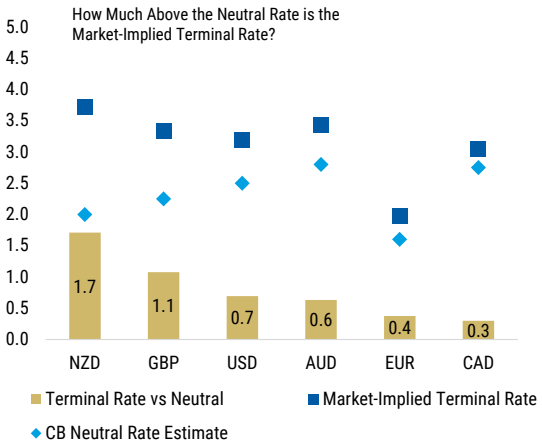
Source: Macrobond, Morgan Stanley Research

If the pace and terminal rate matter so much more, then what determines those? This is where the *why* of cuts is so important. Cutting for different reasons can generate significant differences in pace and termini.

The Fed appears fortunate in being able to cut for 'good' reasons - solid growth but paired with disinflation, or a 'soft landing' scenario. This allows the Fed to cut without a sense of urgency or feeling 'behind the curve'.

Not every central bank may be so lucky - and risks are particularly high in Europe here. Weak growth, rapidly-falling inflation (amplified by imported deflation from China), and limits to fiscal expansion may see these central banks finding themselves 'behind the curve', requiring a less gentle pace of rate normalization and perhaps below-neutral terminal rates.

Exhibit 14: Market-implied terminal rates remain above central bank neutral rate estimates, implying ample scope for markets to price in deeper cuts



Source: Macrobond, Morgan Stanley Research

Exhibit 15: 3m daily correlations, CCY/CCY to 2y rate differentials

	USD	EUR	JPY	GBP	CAD	AUD	NZD	CHF	NOK	SEK
USD		0.45	0.64	0.41	0.14	0.56	0.43	0.40	0.42	0.31
EUR	0.45		0.59	0.57	0.45	0.45	0.55	0.45	0.39	0.18
JPY	0.64	0.59		0.51	0.61	0.50	0.50	0.51	0.49	0.23
GBP	0.41	0.57	0.51		0.37	0.31	0.37	0.32	0.32	0.24
CAD	0.14	0.45	0.61	0.37		0.60	0.52	0.40	0.48	0.26
AUD	0.56	0.45	0.50	0.31	0.60		0.52	0.29	0.27	0.14
NZD	0.43	0.55	0.50	0.37	0.52	0.52		0.19	0.44	0.28
CHF	0.40	0.45	0.51	0.32	0.40	0.29	0.19		0.37	0.00
NOK	0.42	0.39	0.49	0.32	0.48	0.27	0.44	0.37		0.23
SEK	0.31	0.18	0.23	0.24	0.26	0.14	0.28	0.00	0.23	

Source: Macrobond, Morgan Stanley Research

So far markets aren't pricing this risk. The market-implied terminal rates, proxied by the 2y1y OIS rate, is above central bankers' estimates of neutral across the board to varying degrees (Exhibit 14).

But if markets begin to price in greater differentiation in cutting cycles across regions, cross-FX is likely to refclect this divergence given the relatively high correlations to 2y rate differentials across the board (Exhibit 15).

Trade idea: Maintain short EUR/JPY at 158.50 with a target of 145 and a stop of 162

Stay short EUR/JPY: EUR/JPY short remains our highest conviction trade and the best trade to express local and global factors. Increasing risks for more dovish ECB pricing contrast with continued focus on the BoJ exiting NIRP. Falling global rates support JPY longs while the EUR may increasingly be used as a funding currency for risk- and carry-trades. Finally the market remains long EUR/JPY, amplifying the risk of a pullback.

Our Current Stance On Markets

In global rates markets, we enter short 2y SOFR swap spread. We maintain long 5y UST, long 10s on 5s10s30s butterfly, and long Feb44 iota.

In the euro area, we close receive EUR 2y1y vs. 1y1y. We maintain buy RXH4 136/137/138.5 broken call fly, receive EUR 5y5y swap (vs. 6m) versus EUR 20y5y swap (vs. 6m), short EU 3.25% 2034 on ASW, buy EU 0.7% 2051 vs. EU 2.5% 2052, pay Apr ECB, and short BTP 4.40% May '33 vs. Bund 1.7% Aug '32. We maintain long OAT Nov 32 yy ASW vs. EUR 6m vs. OAT May 53 yy ASW vs. EUR 6m, and long OATei31.

In the UK, we maintain receive May '24 MPC, long UKT 1T37vs. short UKT 1T57, sell 15 ASW, and long IL28.

In Japan, we close receive 10y TONA OIS vs. short 30y JGB (DV01 1 vs. 1). We maintain receive 2y TONA OIS outright, short 30y JGB ASW, and SOFR/TONA basis 1y 4s9s flattener.

In the dollar bloc, we maintain pay April 2024 BoC and receive June 2025 BoC. We continue to recommend New Zealand OIS 2s10s steepener and Australia OIS 2s10s flattener.

In foreign exchange markets, we maintain long NOK/SEK (target: 1.06, stop: 0.95), short EUR/JPY (target: 145, stop: 162), and short GBP/NOK (target: 12.20, stop: 14.50).

In FX options, we maintain long EUR/GBP 2-week calls and 1y USD/CHF 10-delta strangle (0.7775 put, 0.9550 call).

Interest Rate Strategy

United States

Another dip buying opportunity? We think the ~18bp rise in 5y yields after the optically strong January payroll report is another dip-buying opportunity, and suggest staying long 5y notes. At the same time, we acknowledge the risk that the January payroll number and the revisions could reset the market narrative on rate cuts, and we keep a tight stop out at 4.24% vs. an entry level of 4.08%.

Should 5y yields have risen by 18bp on payrolls? Note that the seasonal factor for the month of January is nearly negative 2.98 million, by far the highest negative seasonal across the year, suggesting the economy is expected to shed nearly 3 million jobs in January. And therefore, the January payroll report might be less about a high pace of hiring and more about a low pace of layoffs – a sign of labor hoarding.

Wages data keeping up the confidence: Powell noted that the Fed needs to see more inflation data to have "increased confidence" on reaching 2% inflation. While average hourly earnings bounced, it was due to a decline in the number of hours. More reassuring was that both ECI and unit labor costs data were downside surprises, showing wages cooling to levels consistent with 2% inflation.

January FOMC reaction: focusing on the big picture: We think headlines around the March cut, or timing of the first cut in general, has limited consequences beyond the Fed funds contract pricing for the March meeting. We do not think the totality of the Fed's communication is a detriment to being long duration. We stay long 5y notes.

Using CTD switch options to be long duration? With the high switch optionality in the US contract, can investors use the CTD switch option as a way to position long instead of simply buying 5y USTS? While possible in theory, we find that at current valuations, the payout ratios for SOFR swaptions are better to be long, than using the CTD switch option.

Treasury refunding recap: The Treasury announced plans to gradually increase coupon auction sizes at the February refunding, but at a more moderate pace in longer-dated tenors. Nominal coupon sizes are expected to be unchanged "for at least the next several quarters." The date of the first regular Treasury buyback operation is scheduled to be announced at May refunding.

Euro area

On duration, we recap that most of the price action is still driven by the overall amount of cuts priced by the front-end of the market.

The better European data on growth (both leading and hard data), central banks pushing vs market pricing and still stronger-than-expected inflation data, have brought back the pricing of the ECB terminal rate to levels consistent with 2%. If concerns on US regional banks remain isolated and if the market struggles to price-in an even more aggressive cuts profile, it will probably be difficult to sustain the pace of the rally seen over the last couple of risk-off days.

For February, a scenario analysis on front-end pricing highlights a tight-range on the Bund, between 2.18% and 2.24%. Conversely, we highlight how a moderation in issuance pressures and positive seasonality factors, starting around mid-Feb, should support duration, assuming the continuation of a strong data string does not lead to a sustained re-pricing of cumulative cuts.

Analyzing previous ECB cutting cycles, we find that both four months ahead of the first cut and on the day of the first cut (i) markets tended to underestimate cuts, but (ii) little was priced compared to the current cycle. In our opinion, this does not call for a repricing of the ECB terminal rate significantly lower. Accordingly, we prefer to close our receive 2y1y vs. 1y1y (vs. 6m) trade.

United Kingdom

The February MPC has been the main event of the past week, with the focus mostly on forward guidance, voting split and the new set of projections. While the market reaction leaned slightly hawkish after the MPC, due to inflation projections and a voting split that came in less dovish than anticipated, the meeting suggested the potential for easing in the near term if inflation evolves as expected. As such, we maintain our bullish view on front-end MPCs and keep receiving May'24 as the probability for a first cut in 1H could reprice significantly higher, with low downside risks given current valuations.

We also looked at the historical voting split at and before a first cut was delivered, given the last three-way voting split implies a risk of a slower overall MPC reaction function. We found that the MPC's view has changed quite rapidly in the past - despite some dissent just few MPCs before the majority voted for cutting rates, which supports our base case for a first cut in May 2024.

Last, the most recent BoE statistics on gilt net purchases showed a significant net buying in December 2023 (~+£23bn) from overseas investors, while the UK domestic banks' strong demand seen during the current FY paused, as they became net sellers in Dec'23 (~-£1.7bn). However, we do not think the general recent trend has changed, and UK banks' demand should remain strong, buoyed by the appealing level of ASW valuations.

Nevertheless, in terms of market implications, we remain skeptical that the supply/demand backdrop will improve significantly any time soon, with the Budget around the corner and likely an elevated gilt remit considering the ongoing QT, which supports our bearish stance on ASW valuations, hence we maintain our short 15y ASW.

Japan

We discuss why markets would likely find it difficult to price in a sharper rate cutting cycle at this point, although the BoJ has now clearly signalled a near-term normalization. We think exogenous factors will make up a large part of the story.

Given a slowdown in domestic inflation (albeit due mostly to goods rather than services) and overseas expectations of deeper Fed cuts being priced in, we see little reason for markets to expect rapid BoJ rate hikes beyond zero.

We believe that pricing in of such rapid rate hikes could happen if 1) inflation were to show renewed signs of acceleration, or 2) overseas conditions were to start looking more "inflationary" for Japan (with, say, US interest rates rising once again

and/or USD/JPY rallying beyond 150).

Given that neither scenario seems likely to happen any time soon, we see limited scope for the JGB yield curve to be sold off in the medium term. That said, the strong NFP print and the subsequent rally in USD/JPY will likely encourage market expectations for a sharper BoJ rate hike path in near term. As such, we close receive 10y OIS vs sell 30y JGBs. We maintain receive 2y TONA OIS and sell 30y JGB ASW.

United States | A good buy-the-dip opportunity

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	Duration	Curve	Inflation
VIEW	**LONG**	**SLIGHT STEEPENING BIAS**	**NEUTRAL**
Remarks	"Buy the dip" in a bull market; inflation weakness, expected real money interest	Bull steepening; bull flattening in play, steepeners consensus	Breakevens stronger in January, but downside risks from CPI path and hard landing risk
Trades	Long 5y UST		

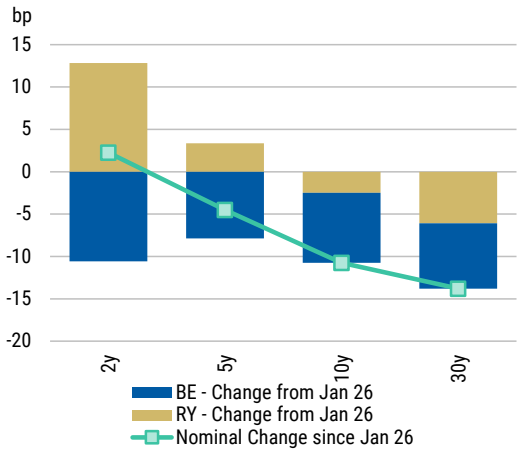
Sticking with buy-the-dip plan

Earlier in January, we suggested investors move to a buy-the-dip mode in the US Treasury market. A week later as yields moved higher, we suggested buying 5y notes. Two weeks later, 5y yields are slightly lower after a sharp round trip over this last week. Weakness in ECI, an uptick in jobless claims, and a mixed FOMC meeting allowed duration to rally, only to be offset sharply by the optically strong January payroll report. Markets have lowered the probability of a March cut to nearly 1 in 5.

We think the ~18bp rise in 5y yields after the optically strong January payroll report is another dip-buying opportunity, and suggest staying long 5y notes. We highlight below why we think investors can look through the January payroll strength. At the same time, we acknowledge the risk that the January payroll number and the revisions could reset the market narrative on rate cuts, and we keep a **tight stop out at 4.24%** vs. an entry level of 4.08%.

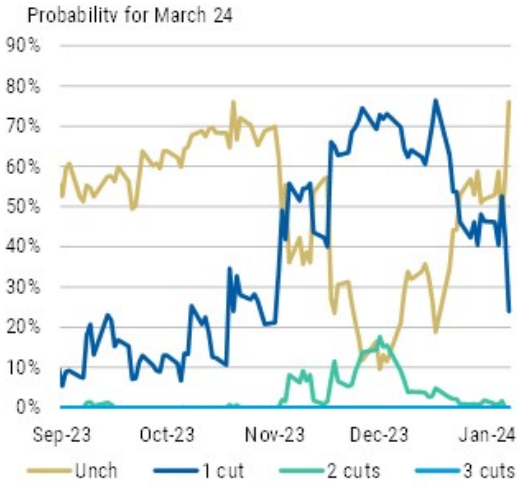
So how can investors interpret the latest payroll report? Thera are two parts to consider: 1) The headline payroll number, which feeds into the Fed's view on the labor market, and 2) The accompanying wage data, which feeds into the Fed's confidence on inflation.

Exhibit 16: Move in Treasury yields over the last week



Source: Bloomberg, Morgan Stanley Research

Exhibit 17: Pricing of probability of a March cut

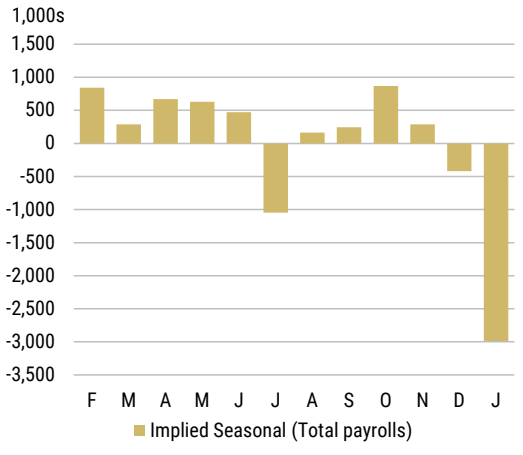


Source: Bloomberg, Morgan Stanley Research

Starting with the headline payroll number of 353k and revisions of 126k over the last two months, one must note that the seasonal factor for the month of January is nearly negative 2.98 million (see Exhibit 18), i.e., 2.98 million people are expected to lose their job in a regular January. This means that the seasonally-adjusted payroll headline is essentially a calculation of how many people lost their jobs relative to the 2.98 million seasonal expectation, and the number for January 2024 is 2.64 million, which implies an outperformance of 353k jobs – the headline payroll print.

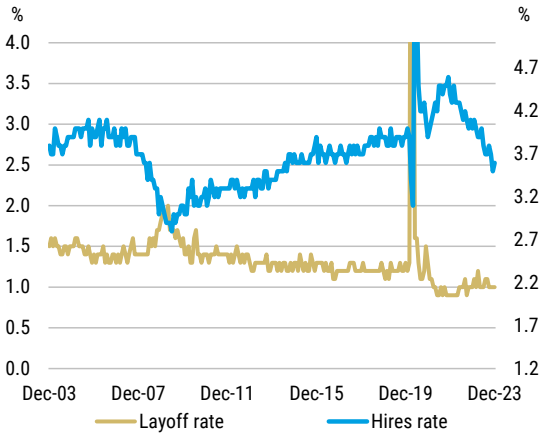
Said differently, **the January payroll report might be less about a high pace of hiring than the low pace of layoffs.** And what is unique about the current labor market is that while the pace of hiring has shown its usual cyclical swings, pace of firing has been very subdued in the current cycle (see Exhibit 19)

Exhibit 18: Total payrolls seasonal factors



Source: Bloomberg, BLS, Morgan Stanley Research

Exhibit 19: Hiring rate and layoff rate over the last twenty years

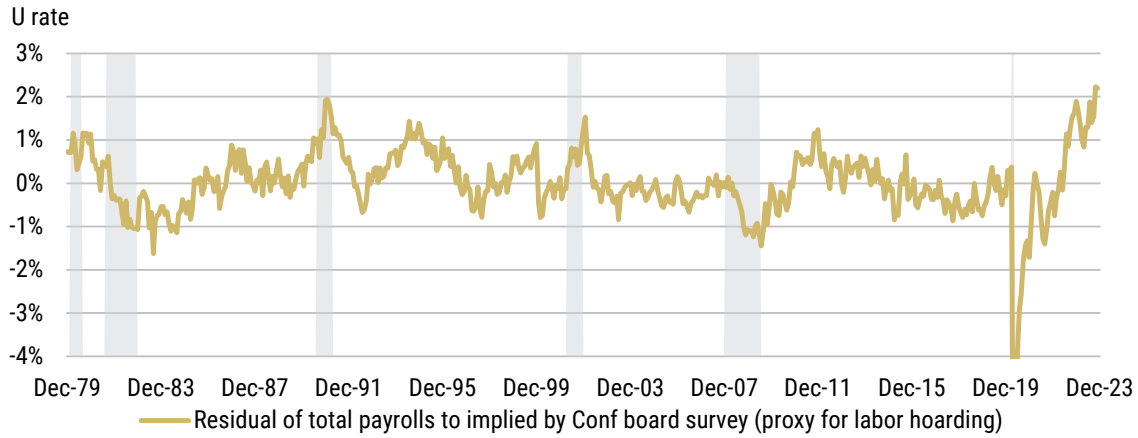


Source: Bloomberg, BLS, Morgan Stanley Research

The strong January headline payroll number thus might be more a sign of the labor hoarding dynamic than of strong hiring. Labor hoarding has meant that the total payrolls employed in the economy has far exceeded the level implied by labor conditions reported on surveys like the Conference Board survey. Exhibit 20 shows the % of excess employment relative to Conference Board's labor differential survey (Jobs plentiful - Hard to get), showing that total payrolls/labor force is higher by nearly 2.5% than it would be, a sign of labor hoarding.

Overall, we think today's payroll headline number shouldn't make investors too ebullient about the pace of hiring, and we think the 18bp rise in yields post payrolls is an exaggerated move for today's print. In the spirit of buying the dip, we suggest investors fade this upside print.

Exhibit 20: Residual of total payrolls/labor force vs. implied by Conference board survey in the last forty years



Source: Bloomberg, Morgan Stanley Research

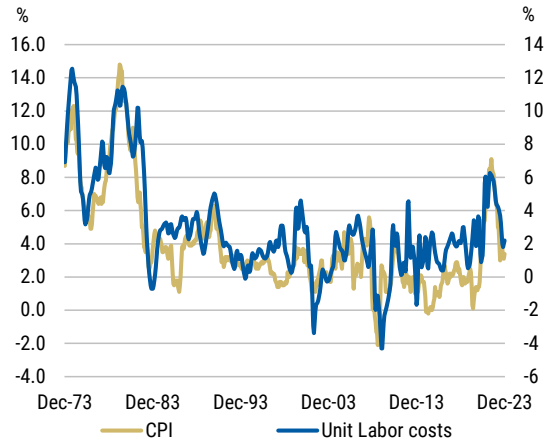
The second aspect of today's print was the rise in average hourly earnings. There are three problems to consider, (1) today's print was optically boosted by a weakening of hours worked in January – a sign of labor hoarding as well as cold weather in January, (2) the total hours worked across the economy has been declining for some time (see Exhibit 21), and (3) cooling ECI and cooling unit labor costs (see Exhibit 22) suggest that ultimately wages have been cooling in line with 2% inflation.

Said differently, **even if one was to fully buy the headline payroll print as a true reflection of a strong labor market, the fact that wages have not moved up significantly should continue to add confidence that the pursuit of 2% target inflation is on track.**

Exhibit 21: Y/y change in total hours worked over the last ten years

Source: Bloomberg, BLS< Morgan Stanley Research

Exhibit 22: Unit labor costs vs. CPI in the last fifty years



Source: Bloomberg, BLS, Morgan Stanley Research

Overall, we see a more balanced picture emerging from the January payroll report, and we think investors should focus on the upcoming inflation print, including CPI revisions where our economists expect minimal changes. If correct, minimal changes to the revised CPI path would help the market price the "increased confidence" it needs for achieving 2% inflation. We suggest maintaining duration longs.

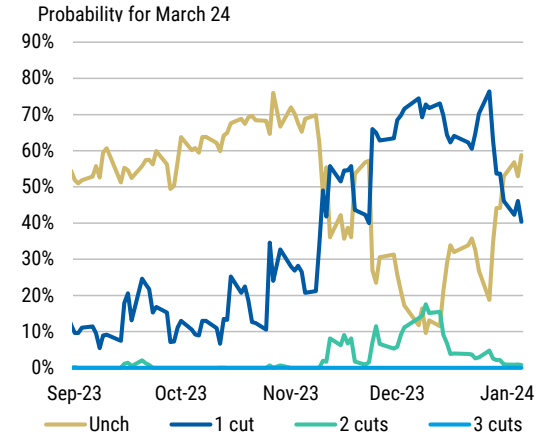
FOMC reaction: "Increased confidence" on duration longs

March cut debate – a red herring for duration investors: The big headline from the January FOMC meeting was that, while the FOMC removed its tightening bias and opened the door to "adjustments", Powell does not think a March cut is "likely". Ultimately, the timing of the rate cut comes down to having "greater confidence" on inflation, and Powell noted that it was not likely that he would have confidence by the March meeting. Our economists do not see a rate cut until June this year.

We think headlines around the March cut, or timing of the first cut in general, has limited consequences beyond the Fed funds contract pricing for the March meeting. **We do not think the totality of the Fed's communication is a detriment to being long duration.**

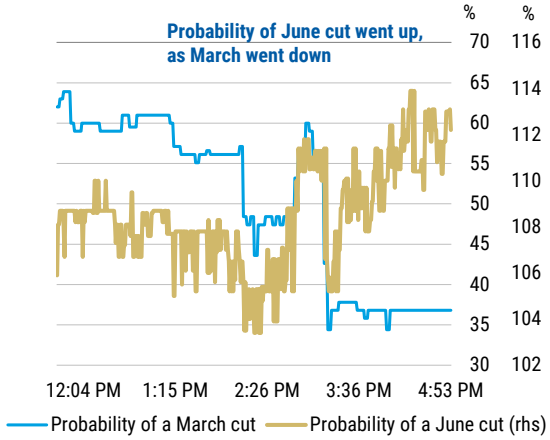
For a start, the pricing of a March cut met with an equal and opposite reaction on the June rate-cut pricing (see Exhibit 24). For most duration investors, the debate is less about whether the Fed starts cutting in March and more about a general cutting trajectory in the coming months, and Powell did not suggest anything that would dissuade the market from pricing a series of cuts in 2024.

Exhibit 23: Probability of a March cut in the last 6 months



Source: Bloomberg, Morgan Stanley Research

Exhibit 24: Current pricing of short-term rates vs. 1 day ago



Source: Bloomberg, Morgan Stanley Research

Powell on base case for March: *Based on the meeting today, I would tell you that I don't think it is likely that the Committee will reach a level of confidence by the time of the March meeting to identify March as the time to do that, but that is to be seen.*

Powell on base case for labor markets: *In a base case, the economy is performing well and the labor market remains strong. If we saw an unexpected weakening in, certainly in the labor market, that would certainly weigh on cutting sooner. Absolutely.*

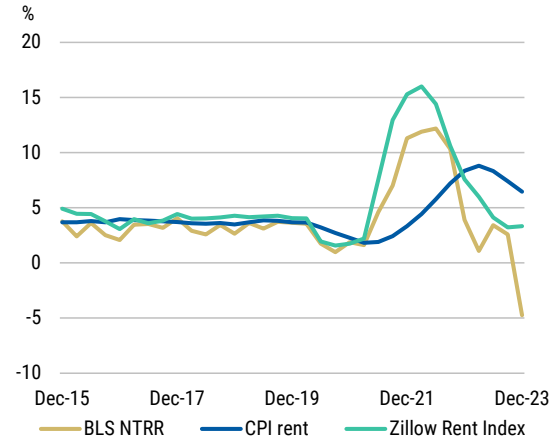
Powell on the link between growth and supply: *A lot of the growth we are seeing, it isn't just a tug-of-war between interest rates and demand. You are getting, you know, more activity because of labor market healing, and supply chains healing. So, I think the question is, when that peters out, I think the restriction will show up more sharply.*

While Powell pushed back against March cut, markets which operate in probabilities, didn't take the probability all the way down to zero. Markets rightly decreased the probability of a March cut after Powell's press conference, and even further after the strong January payroll report.

Between now and March, there are 2 CPI reports and one CPI revision plus one more labor market print – all of which could decide whether the Fed can get "increased confidence" on inflation.

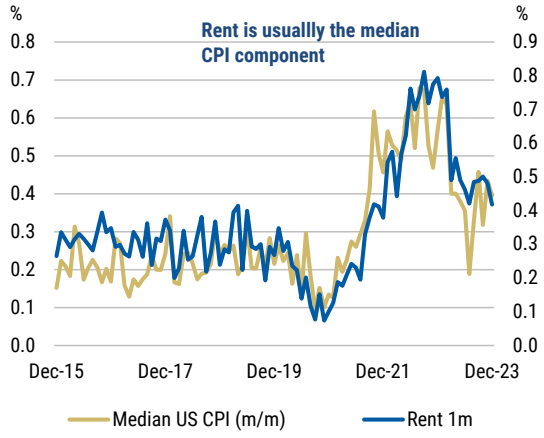
Rent inflation will be important for markets: Our economists do not expect much change from the CPI revisions. It is especially notable that shelter inflation could cool in the coming months based on leading indicators like the "New Tenant Rent" Index, which dropped sharply in its latest reading (see Exhibit 25). Rent inflation downshifts could go a long way in helping with a sense of "increased confidence". That's because shelter inflation prints tend to be sticky, and one low print can convince investors that the median CPI path has been reset lower (see Exhibit 26).

Exhibit 25: BLS New Tenant Rent Index vs. CPI rent inflation



Source: Bloomberg, Zillow, Morgan Stanley Research

Exhibit 26: Monthly rent inflation vs. median CPI print



Source: Bloomberg, Morgan Stanley Research

Fed remains focused on the supply-side gains: Finally, the theme that has reverberated through the last 3 FOMC meetings is the Fed's focus on the supply side (see gray box above). The Fed has acknowledged the role of rising supply as a contributor to higher growth and thereby also noted that high growth by itself would not necessarily be an impediment to achieving 2% inflation, as has been evident in last few quarters. This should decrease the market's sensitivity to growth data surprises and increase its sensitivity to inflation going forward.

Overall, we see the message from the FOMC as conducive to being long duration, and continue to suggest long 5y USTs.

February Treasury Refunding Recap

Prior to February refunding, Treasury announced a privately-held net marketable borrowing estimate for the January – March 2024 quarter of $760bn. This is $55bn lower than the previous estimate, largely due to projections of **higher net fiscal flows** – which reduced the quarterly financing need (-$25bn) – and a mark-to-market (-$19bn) from a higher beginning of quarter TGA cash balance.

For the April – June 2024 quarter, Treasury expects to borrow $202bn in privately-held net marketable debt, assuming an (unchanged) end-June TGA balance of $750bn. Treasury **did not assume a change to the pace of Fed QT runoff** for the April – June 2024 quarter.

We highlight two main implications: **1)** A clear improvement in optics around the fiscal deficit; **2)** A faster pace of Fed QT taper signals downside risk to privately-held net marketable borrowing needs for the April-June quarter.

We update our UST issuance projections for 2024 as well as in 2025. Our economists' base case calls for the Fed to initiate taper in June and lower the runoff caps for Treasury securities to $30bn per month, with an end in 1Q25.

Exhibit 27: Overall financing and issuance figures, CY2023-CY2025 ($bn)

Calendar year	2023	2024	2025
KEY FINANCING FIGURES			
Budget Financing Needs	1783	1828	1782
Cash Balance Increase	322	-19	0
Fed B/S Rolloff from Coupons	646	485	30
Fed B/S Rolloff from T-bills	74	25	0
Net Borrowing Need	2105	1810	1782
OVERALL ISSUANCE FIGURES			
Gross Issuance of Coupons, TIPs, and FRNs (ex Fed reinvestments)	3350	4311	4375
Maturities of Coupons, TIPs, and FRNs (ex Fed reinvestments)	2925	2949	2607
Net Coupons, TIPs, and FRN Issuance	425	1362	1768
Net T-bills (residual) (ex Fed)	1680	448	14
Net Borrowing	2105	1810	1782
PRIVATE ISSUANCE FIGURES			
Fed secondary market purchases of Coupons	0	0	0
Fed secondary market purchases of T-Bills	0	0	0
Net Coupon, TIPs, and FRN Supply to Private Market	1071	1847	1798
Net T-Bill Supply to Private Market	1754	473	14

Source: US Treasury, Morgan Stanley Research forecasts

In its quarterly refunding statement, Treasury announced plans to gradually increase coupon auction sizes for the February – April 2024 quarter, but at a more moderate pace in longer-dated tenors – in line with our expectations. In addition, Treasury does not anticipate further increases in nominal coupon or FRN auction sizes "for at least the next several quarters."

Treasury plans to increase auction sizes for the **2y** and **5y** +$3bn per month, **3y** +$2bn per month, and **7y** +$1bn per month. Treasury plans to increase both new issue and reopening auction sizes for the **10y** +$2bn and **30y** +$1bn. Treasury plans to maintain the **20y** new issue and reopening auction size. Treasury plans to increase the February and March reopening auction size of the **2y FRN** +$2bn and the April new issue auction size by +$2bn.

Exhibit 28: Gross auction size estimates by tenor and month ($bn)

Month	2y	3y	5y	7y	10y	20y	30y	5T	10T	30T	FRN	Total
Jan-24	60	52	61	41	37	13	21	0	18	0	28	331
Feb-24	63	54	64	42	42	16	25	0	0	9	28	343
Mar-24	66	56	67	43	39	13	22	0	16	0	28	350
Apr-24	69	58	70	44	39	13	22	23	0	0	30	368
May-24	69	58	70	44	42	16	25	0	16	0	28	368
Jun-24	69	58	70	44	39	13	22	21	0	0	28	364
Jul-24	69	58	70	44	39	13	22	0	19	0	30	364
Aug-24	69	58	70	44	42	16	25	0	0	8	28	360
Sep-24	69	58	70	44	39	13	22	0	17	0	28	360
Oct-24	69	58	70	44	39	13	22	24	0	0	30	369
Nov-24	69	58	70	44	42	16	25	0	17	0	28	369
Dec-24	69	58	70	44	39	13	22	22	0	0	28	365

Source: US Treasury, Morgan Stanley Research estimates

Exhibit 29: Actual change in supply vs. our forecast ($bn)

Month	2y	3y	5y	7y	10y	20y	30y	5T	10T	30T	FRN
Feb-24	-	-	-	-	-	-	-			-	-
Mar-24	-	-	-	-	-	-	-		-		-
Apr-24	-	-	-	-	-	-	-	+1			-

Source: US Treasury, Morgan Stanley Research

The Treasury plans to maintain the February **30y TIPS** reopening auction size at $9bn, increase the March **10y TIPS** reopening auction size +$1bn to $16bn, and increase the April **5y TIPS** new issue auction size +$1bn to $23bn.

We highlighted risks to more TIPS issuance ahead of refunding and now pencil in a continuation of incremental increases to TIPS auction sizes in the intermediate tenors, in part due to an acceleration in TIPS maturities over the coming years (for more, read here).

Treasury Buybacks

The Treasury intends to announce the date of the first regular buyback operation at May refunding. It anticipates conducting several small-value buyback operations in April to test infrastructure – details will be announced at a later date.

Exhibit 30: Treasury buyback operation summary

Purpose	Target	Eligible Securities	Frequency	Size
Liquidity Support	9 purchase buckets, across the curve	Nominal Coupons, TIPS	1-2 operations per quarter	Max $30bn per quarter
Cash Management	Short maturity off-the-runs (0-2y)	Nominal Coupons, TIPS	Seasonal, dependent on fiscal flows	Max $120bn per year

Source: US Treasury, Morgan Stanley Research

An opportunity in futures switch options?

The USH4 futures contract displays a high degree of optionality (see Exhibit 31): currently, the cheapest-to-deliver (CTD) net basis is worth 7.3 cents, or 2.3 ticks, reflecting a high value of the short position's option to deliver another bond if the CTD switches.

Exhibit 31: USH4 deliverable bond net bases (in dollar terms) under parallel forward curve shifts

Yield Shift (bp)	4.5 Aug39s	4.625 Feb40s	4.75 Feb41s	4.375 May41s	2.375 Feb42s	3.875 Feb43s	3.875 May43s	3 May45s
-150	0.00	0.43	1.39	2.04	5.58	4.67	5.01	9.04
-120	0.00	0.34	1.08	1.61	4.64	3.77	4.05	7.52
-90	0.00	0.25	0.80	1.22	3.76	2.95	3.18	6.13
-60	0.00	0.17	0.55	0.86	2.95	2.20	2.38	4.86
-30	0.00	0.10	0.32	0.54	2.20	1.51	1.66	3.71
0	0.00	0.03	0.11	0.24	1.51	0.89	1.00	2.66
30	0.08	0.05	0.00	0.04	0.93	0.39	0.46	1.76
60	0.29	0.21	0.05	0.00	0.49	0.06	0.11	1.05
90	0.74	0.62	0.35	0.22	0.27	0.00	0.02	0.61
120	1.22	1.06	0.71	0.48	0.11	0.01	0.00	0.26
150	1.72	1.54	1.10	0.79	0.02	0.08	0.05	0.00

Source: Morgan Stanley Research, Bloomberg

Under forward yield curve shifts between -150bp and 150bp, 8 different bonds can become the CTD of the USH4 contract. This is because the deliverable basket is large, and includes bonds with similar yields, coupons, and maturities that are similarly close to being the CTD; in Exhibit 31, we show the net bases of these bonds under different shifts to the forward curve, highlighting the CTD under each shift.

Notice that under very positive and very negative yield shifts, the net bases of non-CTD bonds grow. Accordingly, we can think of a long basis position in a given bond as an option position on the basis: when yields shift further from the range in which a bond is the CTD (and its net basis is zero), the bond's net basis grows.

Is this net basis a good way to position for yield moves with limited downside? In theory, yes. As an example, in Exhibit 31, we see that as yields rise, the net basis between Aug39s and the US contract widen, whereby the US contract stays cheap relative to Aug39s.

Even if this option embedded in the futures is valuable, it is the optimal way to play for yield moves. To figure the optimal way, one has to compare the CTD switch option to swaptions and compare the payout ratios. We found that swaptions generally offer better payout ratios than CTD switch options - see for more details United States | Pricing increased uncertainty.

Trade idea: Maintain long 5s at 3.99%

Euro area | What will February bring ?

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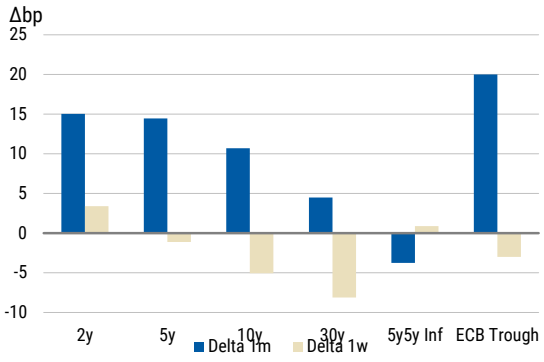
Exhibit 32: Summary of our views

1-month horizon	Duration	Curve	Inflation	ASW	EGB spreads
Macro	Bullish	Steeper	Lower	Stable	Wider
Net supply after QE Valuation Seasonality Technical analysis Market positioning Preferred trades	Bearish Bund LT FV at 2.24% in February Bullish- Feb 12th/29th - Avg rally 13.6bp. 88% prob Daily and weekly stochastics points to overbought Biggest short on RX future Enter RX H4 136/137/138.5 Broken call fly Pay Apr 24 ECB	Steeper EUR 10s30s swap 13bp too flat Close EUR 2y1y vs 1y1y Long EU 0.7% 2051 vs EU 2.5% 2052 EUR 5y5y vs 20y5y steepeners (vs 6m)	EUR 5y5y swap 10bp cheap Long OATei 31	Bobl ASW 6bp cheap Widening pattern from 18th Jan-9th Feb-73% prob Short EU 2034 ASW Long OAT Nov 32 ASW vs May 53 ASW	10y BTP/Bono spread on FV Max long on IK- 6m lookback Short 10y BTP vs Bund
Our view	Range bound in February	Steeper	Stable	To stay cheap vs our model FV	Cheaper BTPs

Source: Morgan Stanley Research

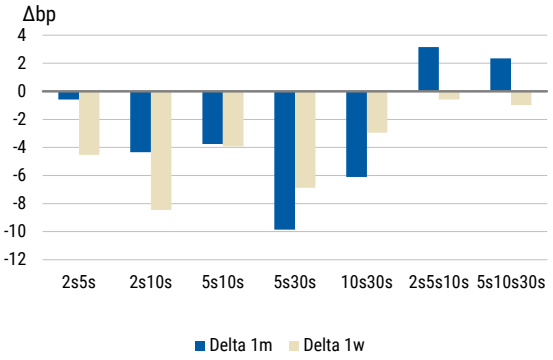
Duration

Exhibit 33: Price action on selected points on the curve



Source: Bloomberg, Morgan Stanley Research

Exhibit 34: Price action on selected curve spreads



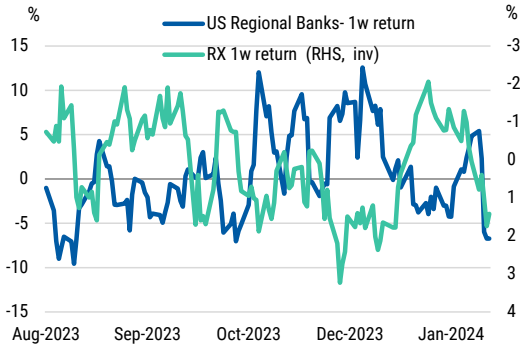
Source: Bloomberg, Morgan Stanley Research

The first month of 2024 is coming to an end. Looking at price action over this timespan, we can see that the repricing on the curve was led by the expectations on the ECB depo trough, which towards the end of 2023 started trading below 2%, bottoming at ~1.8%.

The better European data on growth (both leading and hard data) coupled with the latest round of central banks - where, in a nutshell, the broader message was that central banks are not in a rush to cut, with upside surprises on the inflation front (with services inflation remaining strong, for more see here), brought back the pricing of the ECB terminal rate to levels consistent with the 2% r*.

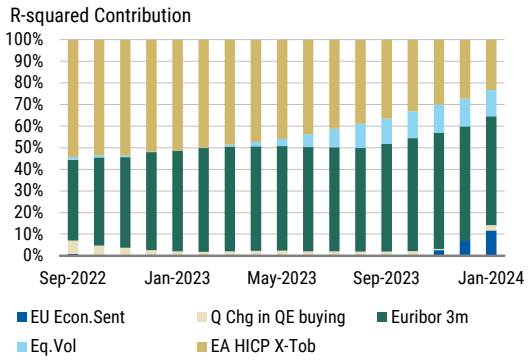
Duration headed slightly cheaper looking at the 1m delta, while this week the mild richening was predominantly driven, in our opinion, by risk-off worries on regional US banks, before the reversal on the strong NFP report today. In Exhibit 35 we can see that the 1w returns of RX became once again (inversely) correlated to the broader US regional bank index, as in March 2023 (see our equity research read on NYCB here).

Exhibit 35: US regional banks index (1w returns) vs RX returns



Source: Bloomberg, Morgan Stanley Research

Exhibit 36: Contribution of total variance explained to our 10y Bund model



Source: Bloomberg, Morgan Stanley Research estimates

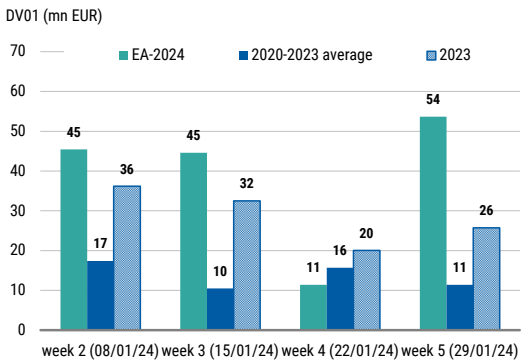
If these concerns remain isolated and if the market struggles to price-in an even more aggressive cuts profile (i.e., the ECB terminates the cutting cycle sustainably below the 2% level), it would probably be difficult to sustain the pace of the rally seen over the last couple of risk-off days.

As previously highlighted, the short-term rates path continues to remain in the driving seat in determining duration price action. This is also the information that we extrapolate from our 10y Bund model, where over the last 3-4 months the Euribor-3m rate path is continuing to explain a bigger chunk of the overall 10y Bund variance as opposed to the HICP dynamics as seen in 2022/2023 (see Exhibit 36).

All of this happened, while on the supply side of the equation the total DV01 of issuance into the market was remarkable (see Exhibit 37), way above what was seen in recent history, as many EA countries continued to front-load their issuance even more forcefully than in 2023.

For context, total gross supply that hit the market this year was 16% higher than the same period in 2023, with notable examples coming from Italy, Austria, France, and Portugal. YTD funding as % of total 2024 projected funding is ~2% higher than 2023, during the same time horizon (see Exhibit 38).

Exhibit 37: DV01 of issuance in Jan 2024 vs history



Source: Bloomberg, Morgan Stanley Research estimates

Exhibit 38: Funding Tracker EA10

Countries	Jan 29th-Feb 2nd	Year to Date (€, bn)	YoY % change	Issued as % of Projected (2024)	Issued as % of tot.realized Issuance (2023)
Austria	0.00	9.2	48%	19%	14%
Belgium	0.00	7.0	-7%	17%	17%
Finland	0.00	3.0		14%	0%
France	12.99	47.0	15%	15%	13%
Germany	15.50	35.0	6%	13%	11%
Ireland	0.00	3.0	-14%	38%	50%
Italy	19.00	44.2	42%	13%	10%
Netherlands	0.00	3.8	-37%	9%	13%
Portugal	0.00	4.0	33%	29%	41%
Spain	6.57	34.7	6%	20%	18%
Total	54	191	16%	15%	13%

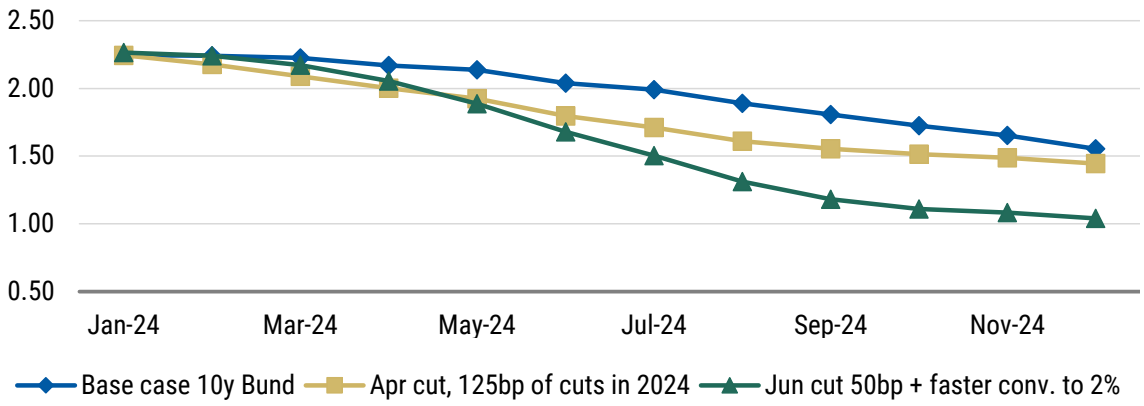
Source: National Treasuries, Morgan Stanley Research

Despite all of this, it appears to us that the market received all this issuance well, and beside RV considerations, probably the "supply factor" continues to be less relevant vs the pre-Covid/QE era, as the macro picture will ultimately determine the amount of demand than will meet (or not) the total supply flood.

For February - we won't have any new information from the big G3 Central Banks, and as such we'll be left continuing to square data releases to gauge new information on where monetary policy is heading in the upcoming months, with narratives continuing to change very quickly.

Doing some simulation work, duration should continue to remain extremely stable in Feb (see Exhibit 39). Whether we assume: **(i)** an ECB cut by April of 25bp and a total 125bp of cut in 2024 (basically what the market is pricing), **(ii)** a 50bp ECB cut in June and a re-converge towards 2% r* already by end of 2024, or **(iii)** our econ base case of 100bp of cuts in 2024, for February we have the 10y Bund hovering in a tight range between 2.18%-2.24% (6bp range amongst scenarios).

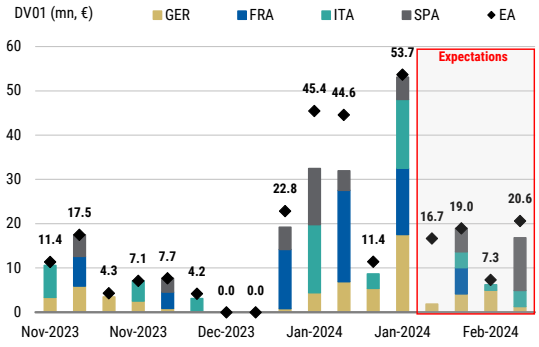
Exhibit 39: 10y Bund path under different assumptions on total delivered cuts



Source: Morgan Stanley Research estimates

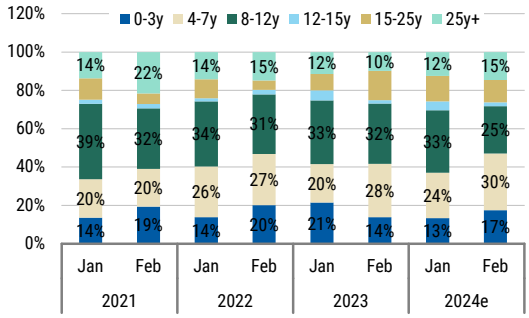
The supply picture will moderate significantly in February (see Exhibit 40), whilst in terms of expected bucket split, long-end issuance will likely remain elevated, factoring the remaining syndication of Belgium and Spain at the long-end of the curve. This, on the margin, should continue to support a 10s30s steepening bias along with 10s30s cash underperformance vs swaps, in our view.

Exhibit 40: Total DV01 of gross issuance (big 4 and total EA10)



Source: Morgan Stanley Research estimates

Exhibit 41: Estimated bucket split of issuance (Jan vs Feb)



Source: Morgan Stanley Research estimates

Lastly, on the seasonal front, history is calling for a richening in duration during the second half of February, with 10y Bund rallying for 13 business days from 12 February close until 29 February close, 88% of the time, rallying on average 13.6bp (2007-2022).

Exhibit 42: 10y Bund seasonal patterns

Bund 10y: Seasonal rally patterns								
Period	Length	Average move	Av. Rally	Obs. Prob	Max	Min	St.dev.	Av. move/St. Dev.
February from d8	**13**	**-10.8**	**-13.6**	**88%**	**11.5**	**-31.6**	**11.0**	**1.0**
June from d8	26	-14.4	-18.2	88%	24.9	-31.4	14.2	1.0
August	14	-7.5	-17.3	69%	24.6	-42.8	19.2	0.4
November from d9	11	-5.2	-11.5	81%	42.0	-42.1	18.2	0.3
Bund 10y: Seasonal sell-off patterns								
Period	Length	Average move	Av. Sell-off	Obs. Prob	Max	Min	St.dev.	Av. move/St. Dev.
June	6	7.1	13.2	69%	39.0	-15.5	13.0	0.5
September	13	8.1	14.9	81%	33.0	-42.1	18.1	0.4
October	12	5.9	10.7	75%	18.7	-11.5	9.8	0.6

Source: Morgan Stanley Research estimates

All in all, on this premise, barring a large repricing in the cumulative amount of cuts priced in the next year, February should remain a month of range-bound trading on duration, with a potential good entry-point for outright exposure at around the 2.30%- 2.35% area on the 10y Bund, with seasonals and the supply picture being more supportive for duration more broadly. We will continue to monitor the ongoing developments.

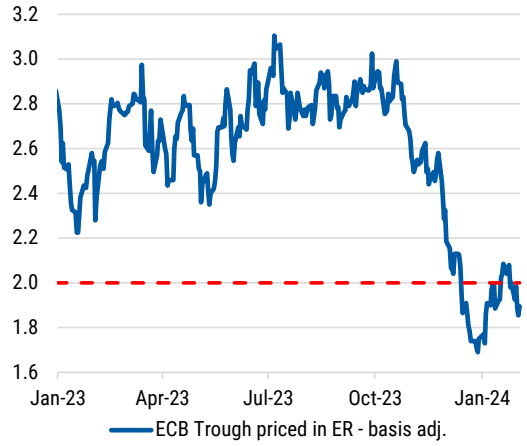
- **Trade idea: Maintain RXH4 136/137/138.5 broken call fly**

Money Markets - Are markets pricing too many cuts?

Last summer, we argued in Towards Inflation Deceleration that not enough cuts were priced in 2024 and showed that markets tend to overestimate hikes and underestimate cuts when the terminal rate is reached both in the US and Europe. Looking at how pricing evolves after the last hike, we also found that within six months, markets were already revising lower their expectations for ECB rates. Indeed more cuts have been priced since, both in 2024 and 2025

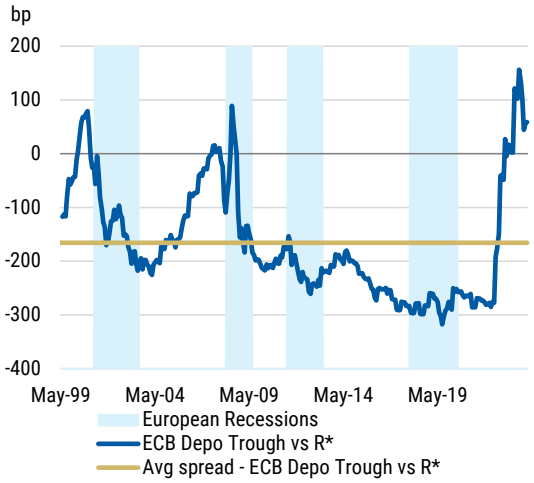
Exhibit 43 shows the trough in the Euribor strip adjusted for the FRA/€str basis. The priced terminal rate post cutting cycle traded in the 2.8%-3% range until late October. Thereafter, the terminal rate plunged more than 100bp, with markets even pricing the ECB cutting below 1.75% in December post Fed pivot.

Exhibit 43: The priced terminal rate post cutting cycle plunged 100bp+ post Fed pivot in December



Source: Bloomberg, Morgan Stanley Research

Exhibit 44: The avg. spread between the priced trough in ECB depo and the nominal r* is historically lower than 0 and on average at -165bp



Source: Bloomberg, Morgan Stanley Research

Exhibit 44 illustrates the spread between the estimated nominal r* - we add the 2% inflation target to the Holston-Laubach-Williams NY Fed estimate of the EA real r* - and the trough priced in Euribor futures.

ECB Chief Economist Lane explained that "*conceptually, the neutral interest rate is the hypothetical level of the interest rate that, when all temporary shocks have faded out, can set the economy on a sustainable path of balanced growth with inflation durably at target. As actual rates move beyond that level, policy becomes restrictive – as is necessary when inflation is otherwise set to remain above the central bank's target for an extended period*" (Feb 23 speech).

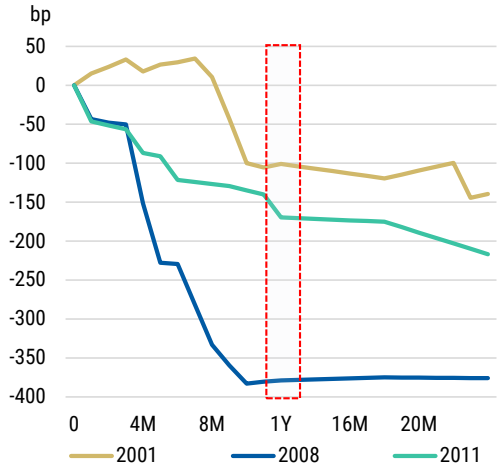
Bearing in mind the neutral rate is not observable and different estimates can be made, a few deductions can be drawn from the above chart: **(i)** the average spread between the priced trough in ECB depo and the nominal r* is historically lower than 0 and on average at -165bp over the past 24 years, **(ii)** despite the significant move over the past months in the ECB trough, at the current level of pricing the terminal depo rate would still be restrictive vis a vis the HLW estimate, with the difference between the two being ~60bp positive (and ~220bp above the long-term average).

Following the above observations, the current market pricing can be questioned. Thus we revisit the analysis done last summer to gauge how markets tend to price cutting cycles as we get closer to the first cut.

Our economists expect the ECB will deliver its first cut in June, i.e., roughly four months from now. As such, we focus on market pricing **(i)** four month ahead of the first cut, and **(ii)** from the day of the first cut in the 2001, 2008 and 2011 ECB easing cycles (for more on the cycles, see Sticking The Soft Landing > Euro Area | Curve).

In Exhibit 45 , we plot the ECB rate path implied by forward OIS four months before the first cut in each cycle vs what was the actual level of the base rate (MRO or depo whichever was more relevant) upon the forwards' expiry. In all instances, markets were underestimating the total amount of cuts. Particularly, one-year ahead the ECB main rate ended at least 100bp and up to 350bp+ below market expectations.

Exhibit 45: Four months before the first cut, markets underestimated the total amount of cuts in the coming year

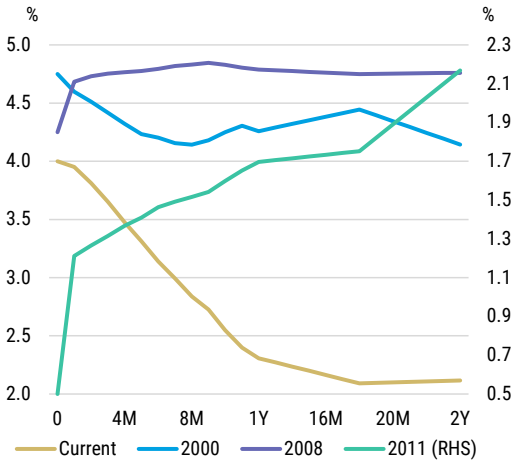


Source: Bloomberg, Morgan Stanley Research; Note: forward OIS (eonia) adjusted of spread eonia/depo or mro

Does this mean markets are not pricing enough cuts in this cycle as well? Not necessarily. Exhibit 46 shows the ECB path implied by forwards OIS four months before the start of the easing cycle. **Noticeably, markets are pricing a lot more cuts now than they were in previous cycles** - in the 2008 and 2011 cycles markets were even pricing hikes. **This makes the above conclusion less relevant to the current cycle and market pricing, in our opinion.**

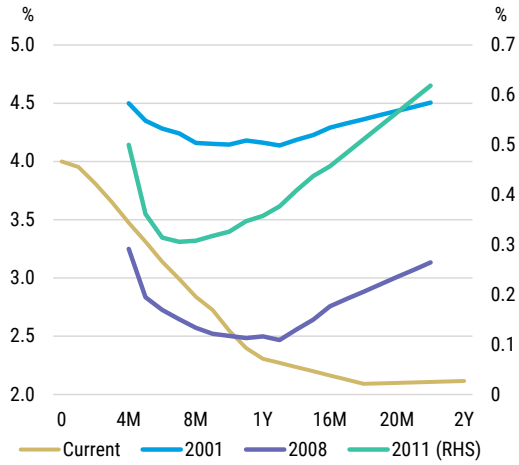
Looking at pricing on the day of the first cut (see Exhibit 47), in the 2008 and 2011 cycles, markets switched from pricing hikes to cuts. However, the magnitude of cuts priced was relatively small compared to the current pricing. Interestingly, markets were also expecting the ECB to hike back while current pricing suggests a convergence to 2%.

Exhibit 46: Markets are pricing more cuts now than they were in previous cycles



Source: Bloomberg, Morgan Stanley Research

Exhibit 47: Current pricing vs. pricing on the day of the first cut in each cutting cycle



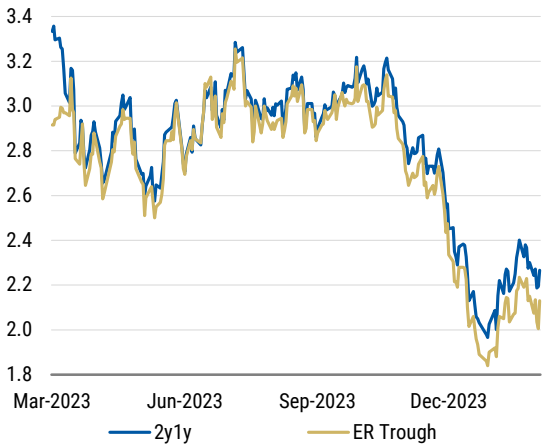
Source: Bloomberg, Morgan Stanley Research

All in all, **(i)** markets tended to underestimate cuts in the past but **(ii)** little was priced compared to the current cycle. **In our opinion, this does not call for a repricing of the ECB terminal rate significantly lower, at this stage.**

In Back To Square One, we recommended receiving 2y1y vs. 1y1y. The 2y1y leg is without surprise correlated to the ER trough (see Exhibit 48) and 2y1y vs. 1y1y is directional to ERZ4/ERZ5. For now, we think the trade isn't as attractive from a risk/reward perspective for the reasons mentioned above.

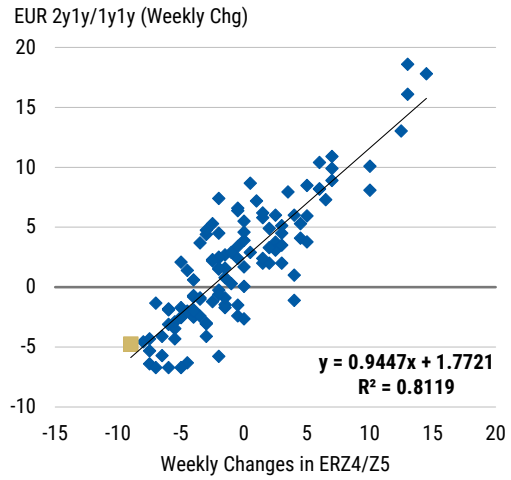
Additionally, we don't foresee the cumulative number of cuts priced in 2024 decreasing meaningfully until markets get more reassurance on the timing and size of the first cut. Since ERZ4 is driving the spread, we close the trade.

Exhibit 48: The 2y1y leg is correlated to the ECB trough



Source: Bloomberg, Morgan Stanley Research

Exhibit 49: Weekly change in 1y1y vs. 2y1y and ERZ4/Z5



Source: Bloomberg, Morgan Stanley Research

- **Trade idea: Close EUR 2y1y vs 1y1y (vs 6m) flatteners**
- **Trade idea: Maintain pay April ECB**

VALUATION UPDATE:

Below we provide the outputs of our models, including the gap to fair value (i.e., dislocation) in bp and z-score.

Exhibit 50: Models' output

	Current	Gap vs. model fair value (bp)	Z-score
Swap curve (bp)			
EUR 2s10s (vs. 6m)**	28.3	16.2	1.2
EUR 10s30s (vs. 6m)	-21.3	-13.7	-1.7
EUR 10s30s (vs. ester)	-4.2	-8.1	-1.1
EUR 30s50s (vs. 6m)	-29.7	0.0	0.0
GBP 10s30s (vs. sonia)*	14.8	2.7	0.3
Swap flies (bp)			
EUR 2s5s10s (vs. 6m)	-38.6	6.8	1.4
EUR 2s5s10s (vs. ester)	-43.9	5.6	1.3
EUR 5s10s30s (vs. 6m)	22.7	7.3	1.4
EUR 5s10s30s (vs. ester)	10.6	3.3	0.7
GBP 2s5s10s (vs. sonia)*	-11.0	1.3	0.2
Cash slopes (bp)			
OAT 10s30s*	3.9	-1.7	-0.3
Bono 10s30s*	-1.8	4.1	0.9
BTP 10s30s*	10.1	3.3	0.7
Cash flies (bp)			
GER 2s5s10s	-47.8	9.9	1.6
OAT 2s5s10s**	-2.1	3.4	0.3
BTP 2s5s10s**	-3.6	1.2	0.4
Bono 2s5s10s**	-4.5	6.2	1.0
OAT 5s10s30s**	-4.6	-6.1	-1.6
BTP 5s10s30s**	-6.0	-0.5	-0.1
Bono 5s10s30s**	-0.4	-5.5	-1.3

	Current	Gap vs. model fair value (bp)	Z-score
German ASW (bp)			
Schatz	40.2	-12.6	-1.1
Bobl	45.9	-5.5	-0.8
Bund	44.5	-3.4	-0.5
Buxl	11.1	-4.5	-0.7
French ASW (bp)			
OAT ASW	-3.5	3.4	1.5
Euro inflation (%)			
2y2y	2.09	-5.8	-0.3
5y5y	2.25	-8.4	-0.5
10y10y	2.50	-10.2	-0.7
Spreads (bp)			
2y BTP-Bono	0.2	-12.0	-1.2
5y BTP-Bono	42.5	-1.3	-0.1
10y BTP-Bono	59.6	-2.8	-0.2
15y BTP-Bono	59.8	-1.3	-0.1
30y BTP-Bono	41.7	-5.7	-0.8
2y UST-Bund**	-27.9	-26.2	-1.0
5y UST-Bund**	-0.7	-33.9	-1.5
10y UST-Bund**	-2.9	-31.5	-1.7
30y UST-Bund**	20.8	-7.5	-0.4

Note: *Positive z-score/gap = curves too steep, belly too cheap on flies, ASW too rich, inflation too rich and spreads too tight vs. model fair value; z-score computed over the period of the rolling regression, * 3 month change, ** 6 month change*

Source: Morgan Stanley Research estimates

United Kingdom | Expectations after the February MPC

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Exhibit 51: Summary of our GBP views

1-month horizon	Duration	Curve	ASW	Inflation
Macro	Bullish	Steeper	Tighter	Lower
Net supply	Bearish	Steeper		
Valuation		GBP 2s5s10s swap fly 3bp rich		
Seasonality	Bullish seasonality from February 12th			
Technical analysis				
Market positioning		Steepeners	Short	
Preferred trades	Receive May'24 MPC	Long UKT 1T37 versus short UKT 1T57	Sell 15y Gilt ASW	
Our view	**Neutral**	**Steeper**	**Tighter**	**Lower**

Source: Morgan Stanley Research

February MPC - Main Takeaways and Implications

The BoE kept rates unchanged at the February MPC as largely expected, while the focus was on **forward guidance, voting split and the new set of projections**. The market reaction leaned slightly hawkish after the MPC, due to inflation projections and a voting split that came in less dovish than anticipated, although UK duration was supported by US data and geopolitical headlines, with yields ending lower.

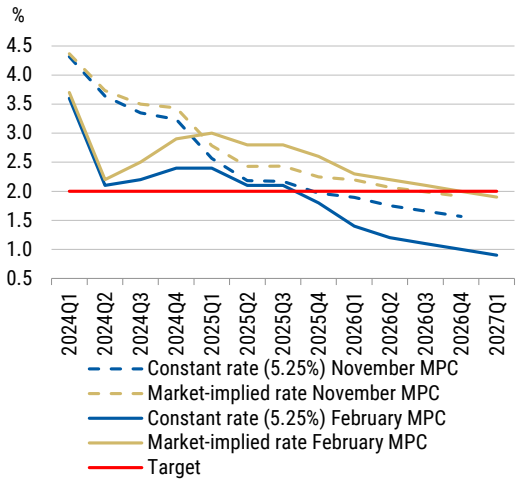
The press conference was relevant, in our view, given cuts were brought into the debate - a significant change compared to the December MPC. The main takeaway from the press conference was indeed that rates cuts will come, and it is just a matter of time. The BoE indeed signalled that some easing should be required if inflation evolves as expected and barring macro data surprises. This suggests the potential for easing in the near term, and keeps the door open for a first cut in May 2024 - in line with our economist modal view. With these considerations, we maintain our bullish view on front-end MPCs and **keep receiving May'24 MPC,** as the probability for a first cut in 1H could reprice significantly higher, with low downside risks given current valuations. In the below section we dig further into the details of the last MPC and its main implications.

First, in the forward guidance we got a significant change compared to the December MPC, as the tightening bias was removed. While in the previous MPC the minutes explained that "*Further tightening in monetary policy would be required if there were evidence of more persistent inflationary pressures*", this sentence was removed in the last MPC, which opens the door to some easing in the short term. On the other hand, the high-for-longer stance has been kept, but this was largely expected given upside risks to the inflation outlook remain and the MPC wants to maintain a still-restrictive monetary policy. A change in the high-for-longer stance would have driven an aggressive repricing of cuts expectations and a loosening of the monetary policy stance via lower mortgages rates.

Second, on the new set of projections, they definitely paint a better outlook for the UK economy amid low inflation (see Exhibit 52) and better growth projections (see Exhibit 53). As pointed out above, the near-term inflation projections probably came in higher than consensus, supporting the initial market reaction (see Exhibit 52). While inflation is expected to drop just above 2% in Q2 2024, a rebound is then expected by the BoE with headline at 2.5 %Y and 3 %Y in Q1 2025, at constant rate and market implied rate, respectively.

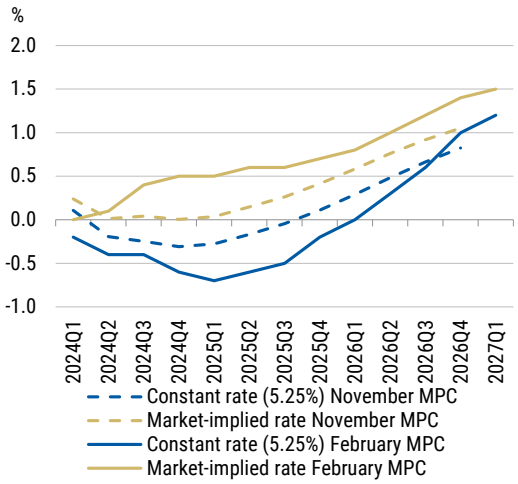
This v-shape in projections supported a cautious messaging from the MPC, despite the focus remaining on domestic and services inflation, which are still too elevated for the MPC, and a slowdown in these components could support a dovish pivot from the BoE and drive market expectations in the near term. That said, it also stands out from the projections that some easing should be required in the short term, given inflation is expected to significantly undershoot the BoE target with the current stance of monetary policy (see the constant rate projections).

Exhibit 52: A rebound in inflation is expected while the current monetary policy stance looks too restrictive



Source: BoE, Morgan Stanley Research

Exhibit 53: A better outlook for the UK economy, with lower inflation and higher GPD growth



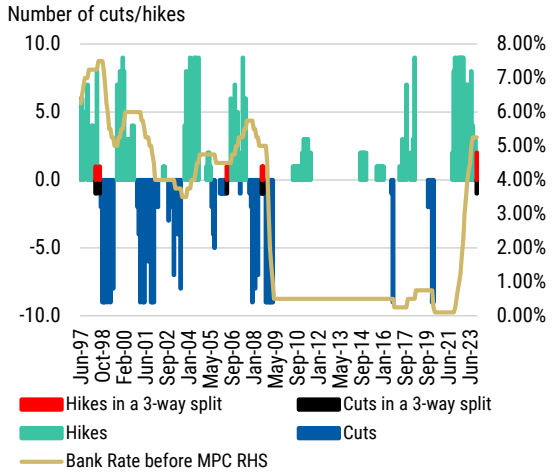
Source: BoE, Morgan Stanley Research

Last, on the voting split: a three-way voting split was delivered, which remains very uncommon by historical standards. Two votes for hiking rates were delivered, while Dhingra voted for cutting rates - which is an important shift, in our view. Indeed, the core of the Committee's view is crucial for a BoE dovish pivot, and we think of that as being closer to Dhingra's views. However, it makes it challenging for the BoE's message to be that rate cuts are needed as long as two of its members vote for hikes, and while Mann and Haskel could move to voting for a hold in March, the stickiness of their views implies a risk of a slower overall MPC reaction function, in our view. With these considerations, we look at what has happened in the past, in terms of voting split at and before a first cut was delivered, in order to gauge how quickly the Committee's view has changed in the past and could change, and how the MPC was divided before and into the meetings. From historical data it can be noted how the MPC's view has previously changed quite rapidly - despite some dissent from just a few MPCs before the majority voted for cutting rates.

First, a three-way voting split has already happened a few times since 1997 — six times in total, the last time being the August 2008 MPC (see Exhibit 54). Hence, although it is not common, it has already happened several times. Second, a two-way voting split with one or more members voting for holding rates into the cutting decision has also already happened previously, both in February 2003 and August 2005 (see Exhibit 55). At the meetings before the first cut was delivered, the number of votes for holding rates has ranged from five to eight, hence the Committee's view could change very quickly in just a meeting.

The voting split at two-meetings before the first cuts were delivered shows a high degree of dissent, as some members have voted for hiking rates in previous cycles with two cases where we had a three-way voting split (October 1998 and October 2008). Thus, a pivot from "some hikes to the majority voting for cuts" is possible in the space of just two MPCS. Last, we look at when one or more votes for cuts were delivered before the majority of the Committee voted for cutting rates. That happened two meeting ahead in most cases, while we had two cases where there was one or more votes for hikes "just" two or three meetings before the majority of the Committee voted for cutting rates (October 1998 and August 2005).

Exhibit 54: Number of Hikes and Cuts over past MPC decisions



Source: BoE, Morgan Stanley Research

Exhibit 55: Voting splits at and before the majority of the MPC voted for cutting rates

MPC Dates	Voting Split	First MPC with Cuts vs MPC date	Last MPC with hikes vs MPC date	Voting Split Previous MPC	Voting Split 2 MPCs before
08-Oct-98	9-0-0	2	2	2-7-0	1-7-1
08-Feb-01	9-0-0	2	5	4-5-0	2-7-0
06-Feb-03	7-2-0	4	7	2-7-0	2-7-0
04-Aug-05	5-4-0	2	3	4-5-0	2-7-0
06-Dec-07	9-0-0	2	5	2-7-0	1-8-0
08-Oct-08*	9-0-0	-	-	1-8-0	1-7-1
04-Aug-16	9-0-0	1	7	1-8-0	0-9-0
11-Mar-20	9-0-0	3	13	2-7-0	2-7-0

* First MPC with Cuts vs MPC date and Last MPC with hikes vs MPC date has not been reported as a first cut was delivered in Dec'07

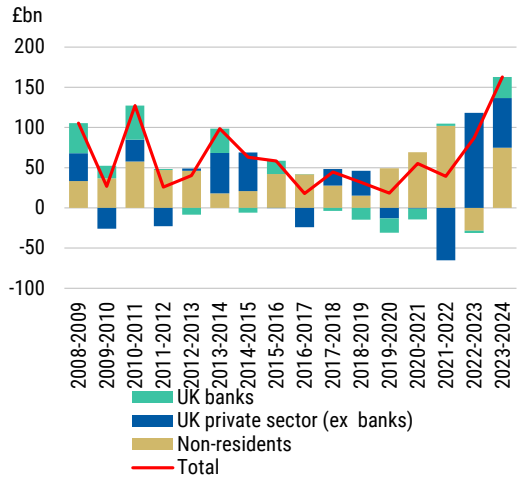
Source: BoE, Morgan Stanley Research

Gilts Demand: Strong Demand from UK Banks Likely to Continue but Limited Impact on ASWs

The BoE statistics on gilt net purchases (up to Dec-23) were released over the past week - and point to a significant net buying in December (~+£23bn) from overseas investors, while UK domestic banks' strong demand seen during the current FY paused, as they became net sellers in Dec'23 (~-£1.7bn), see Exhibit 56 . However, we think the general recent trend has not changed, with UK banks' demand being particularly strong. They have bought ~£26bn of gilts since April 2023, which is significant by historical standards and when compared to overseas net buying of ~£75bn, with the latter being historically the major holders of gilts after insurance companies and pension funds. In addition, December demand from overseas investors has been usually pretty strong with data suggesting some seasonality. Last, we think UK bank demand will remain buoyed by the appealing level of ASW valuations (see Exhibit 57), as the UK banks tend be ASW buyers. In terms of market implications, however, we remain skeptical that demand from UK banks while remaining strong will prevent ASW valuations from cheapening further, hence we keep our bearish stance on ASWs and maintain our short 15y ASW. Looking ahead, the upcoming remit could be particularly elevated once QE and QT are considered and our initial estimates see total gilt supply at ~£265bn up from this FY supply at ~£237bn, with active QT possibly adding ~£25bn.

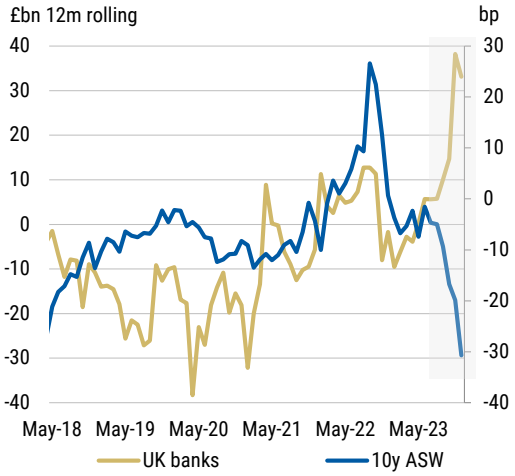
All in all, the demand/supply outlook remains negative for ASW valuations, in our view - with demand from UK banks unlikely to improve the backdrop significantly. In addition, buyout flows will probably weigh on ASW valuations as well - and offset at least partially any pickup in demand from UK banks - especially in the medium- and longer-term horizon.

Exhibit 56: Annual net purchase of gilts and breakdown



Source: BoE, Morgan Stanley Research

Exhibit 57: A strong demand from UK banks likely buoyed by attractive ASW valuations



Source: BoE, Morgan Stanley Research

- **Trade idea: Maintain receive May'24 MPC at 5.04%, target 4.85%**
- **Trade idea: Maintain long UKT 1T37 versus short UKT 1T57 at 20.5bp, target 60bp, stop 0bp.**
- **Trade idea: Maintain short 4T38 ASW, entry -49.2bp, target -65bp**

Japan | Will markets price in an aggressive BoJ rate hiking cycle?

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Why markets won't price in an aggressive rate hiking cycle

The closely watched "Summary of Opinions" for the January BoJ monetary policy meeting was generally hawkish in tone, with a number of board members suggesting that the likelihood of achieving the +2% "price stability target" on a sufficiently sustainable and stable basis has improved. Moreover, several comments indicated that discussions of the eventual "normalization" process are now well under way.

For example, greater confidence was expressed about the prospect of achieving a "virtuous cycle between wages and prices" amid signs of services prices continuing to trend higher and firms being willing to offer sizable spring wage hikes.

Key Comments from the Summary of Opinions

- ***There is a growing possibility that the wage growth to be agreed in this spring's labor-management wage negotiations will exceed that agreed last spring.*** *Therefore, there is increasing momentum toward achieving a virtuous cycle between wages and prices.*

- *Various information that has come out since the previous MPM shows that* ***(1) wage hikes can be expected, including among small and medium-sized firms, and (2) the rate of increase in services prices has remained high, reflecting a rise in personnel expenses****. Given this, it can be assessed that the likelihood of achieving a virtuous cycle between wages and prices has risen further in a steady manner.*

- *There is a growing possibility that* ***wage revisions for this spring will be at relatively higher levels than in the past; in addition, economic activity and prices overall have been on an improving trend.*** *Given these factors, it seems that conditions for policy revision, including the termination of the negative interest rate policy, are being met.*

Such comments suggest strongly that the BoJ has started to see a higher likelihood of achieving the +2% "price stability target" on a sufficiently sustainable and stable basis, and our economists are thus forecasting that the necessary threshold of confidence for an exit from the negative interest rate policy (NIRP) could therefore end up being reached when the board next meets on March 18–19.

The general market consensus appears to be that a NIRP exit will come in either March or April, with such expectations having instantly driven domestic interest rates higher in the immediate wake of the "Summary of Opinions" release (see Exhibit 58). This uptrend proved very short-lived, however, with the entire curve actually moving lower over the week as a whole.

Why haven't rates moved sharply higher amid expectations that BoJ "normalization" is imminent? **Exogenous factors appear to be a large part of the story.** For example, a number of comments in the "Summary of Opinions" suggested that while board members have indeed started to suggest possible normalization moves, there is also a strong belief that the **post-NIRP trajectory of the policy rate will need to depend on prevailing economic, inflation, and financial conditions at any given point in time.**

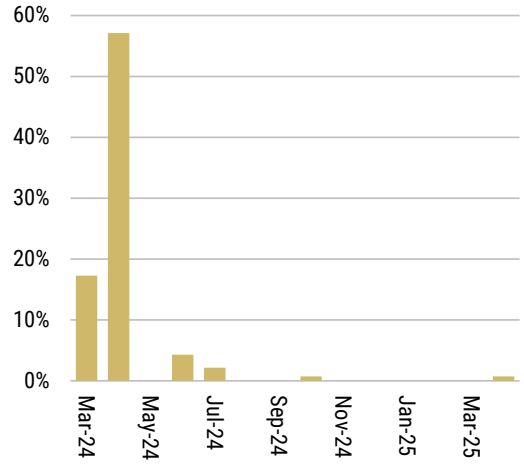
> *- Since it is difficult to determine in advance the path of the policy interest rates after the exit from the current monetary policy, the Bank needs to consider this in response to developments in economic activity and prices as well as financial conditions at each point in time.*
>
> *- While the sequence of steps that the Bank will take in proceeding with policy change depends on developments in economic activity and prices as well as financial conditions at each point in time, a basic principle is that measures with large side effects are revised first.*

As we discussed in "Japan | Back To Duration, And Back To Carry", Governor Kazuo Ueda went a step further than previously with his allusions to such matters in his January post-meeting press conference, saying that the central bank's current views on the economic outlook point to monetary conditions being kept accommodative even after NIRP is brought to an end.

The basic takeaway was that Ueda does not envisage a need for rapid monetary tightening under a scenario of economic growth remaining robust, goods inflation continuing to slow, and services inflation meanwhile quickening sufficiently to support a gradual rise in "underlying" inflation towards +2% YoY.

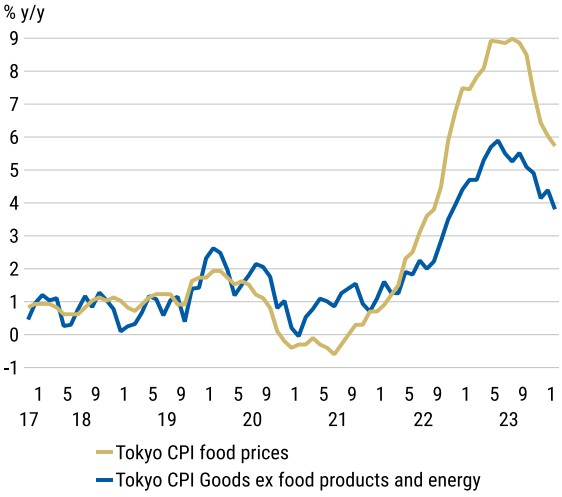
The Tokyo CPI print for January (released after the BoJ meeting) was in fact basically consistent with this scenario, showing continuing goods disinflation as well as further gradual rises in general services prices after excluding those components that are particularly sensitive to import prices or otherwise volatile (see Exhibit 59 , Exhibit 60).

Exhibit 58: Quick bond market survey in January: when do you think the BoJ will remove NIRP?



Source: Quick, Morgan Stanley Research

Exhibit 59: Tokyo CPI goods inflation breakdown



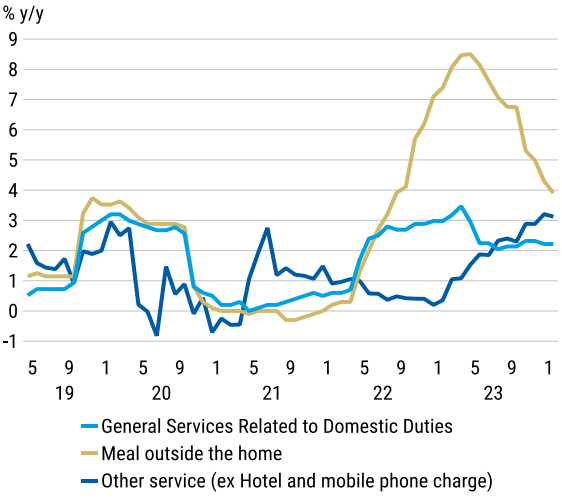
Source: Morgan Stanley Research, Macrobonds

Overseas, markets have dialed back their expectations for a March Fed rate cut to some degree following Chair Jerome Powell's "not the most likely case or the base case" declaration following the January FOMC meeting.

However, markets have meanwhile started to price in a deeper subsequent rate cut trajectory in an apparent reflection of softening inflation and labor market data as well as renewed concerns over some regional banks (see Exhibit 4).

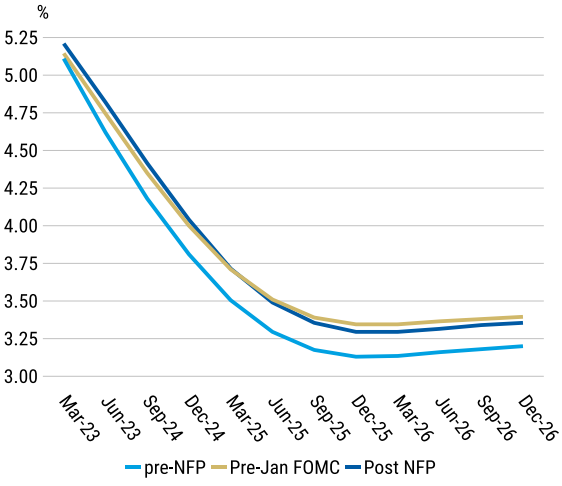
Such pricing was reversed after the strong NFP print, but the market seems not to be repricing higher the eventual short-term neutral rate, given that the strong numbers appear to come mostly from seasonal adjustments as we often see in January.

Exhibit 60: Tokyo CPI service inflation breakdown



Source: Morgan Stanley Research, Macrobonds

Exhibit 61: Fed market pricing around the January FOMC



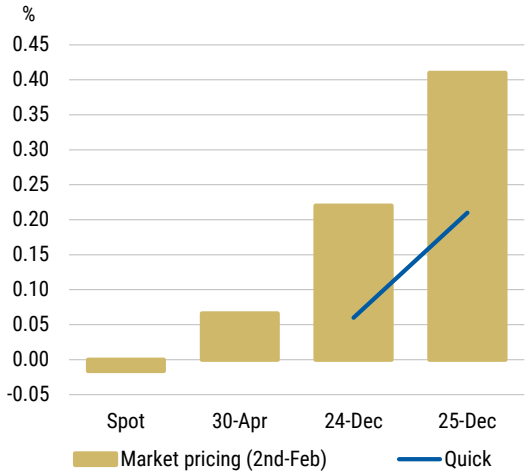
Source: Morgan Stanley Research, Bloomberg

Given the above—a slowdown in domestic inflation (albeit due mostly to goods rather than services) and overseas expectations of a relatively sharper Fed rate cut pricing being maintained**—we basically see little reason for markets to be expecting rapid BoJ rate hikes beyond zero.**

Our recent discussions with investors have told us that **most focus predominantly on US interest rates and the US economy when formulating their forecasts for JPY rates**. Moreover, we have been left with the impression that domestic and overseas investors alike no longer envisage any sort of rush towards further "normalization" after NIRP is brought to an end (see Exhibit 62).

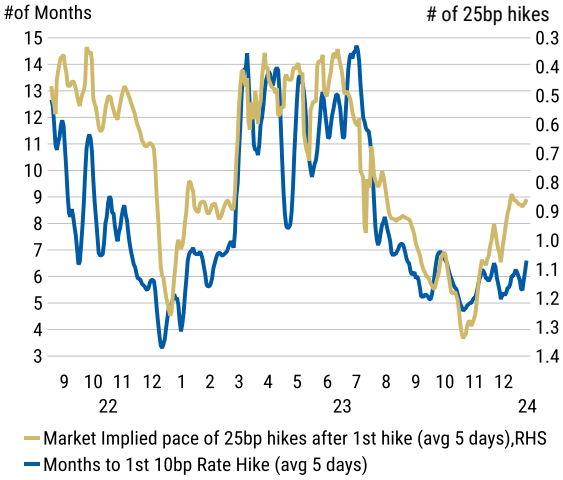
Such attitudes contrast starkly with those seen after the BoJ effectively rendered its "yield curve control" (YCC) framework meaningless at the end of last October (see Exhibit 63), when it appeared that many investors expected the BoJ to quickly hike its policy rate to around 1% (once normalization commenced) and allow for the 10y JGB yield to climb above 1.0% (we ourselves had constructive view for JGB yields at that time).

Exhibit 62: Market expectations for future BoJ policy path



Source: Morgan Stanley Research, Bloomberg

Exhibit 63: Market pricing for months to 1st 10bp hike and market implied pace of hikes after first rate hike (# of 25bp hike)



Source: Morgan Stanley Research, Bloomberg

The 10y UST yield had at that time climbed to almost 5%, with many talking of a "no landing" scenario or the possibility that the "neutral" interest rate level might be higher than envisaged. Japanese inflation was meanwhile climbing steadily higher with USD/JPY above 150 and the impact of previous rises in import costs continuing to filter through to goods prices.

In other words, overseas investors did appear to have reasonable grounds for supposing that the BoJ might eventually be forced into rapid rate hikes as a consequence of inflation proving "stickier" than anticipated.

The flipside is that we would not expect markets to start pricing in a rapid BoJ rate hike trajectory once again 1) **unless inflation were to show renewed signs of acceleration** (as might happen for predominantly technical reasons in February as subsidization of household energy bills passes the one-year mark), or 2) **overseas conditions were to start looking more "inflationary" for Japan** (with, say, US interest rates rising once again and/or USD/JPY rallying beyond 150). **We thus see limited scope for the JGB yield curve as a whole to be sold off .**

Suggested positioning

That said, given the strong NFP print and the subsequent rally in USD/JPY, we see a risk that the market may price in a sharper rate cut path once again, and the belly could underperform on the curve. As such, we close receive 10y OIS vs. 30y sell JGB (DV01 neutral) trade. We maintain our receive 2y OIS outright position as the front-end has already priced in a gradual rate hike path.

We continue to see potential for the long-end of the curve to keep underperforming given that the supply/demand balance remains far from favorable, particularly ahead of 30y supply next Wednesday, owing to the lack of a fixed investor base (by comparison with shorter maturities)l. We therefore continue to recommend positioning for further cheapening of 30y JGBs via 30y ASW shorts.

- **Trade idea: Close Receive 10y OIS vs Sell 30y JGB (DV01 neutral)**
- **Trade idea: Maintain sell 30y JGB ASW**
- **Trade idea: Maintain receive 2y TONA OIS outright**

Currency & Foreign Exchange

G10

G10 | Warping the pace-time continuum

When are central banks beginning their cuts? 'Who cares'. Investors are highly focused on central bank rhetoric to guide the likely timing of the first rate cut. But currencies are driven more by broader rates as opposed to the very front end, and compared to the pace of cuts and the terminal rate, the timing of the first rate cut is relatively less impactful.

'How fast' and 'how low' will rates go? This has a big impact on rates and currencies to boot. 'Why' central banks are cutting is a key determinant of the pace and terminal rate.

Markets are pricing in a pace of cuts for Europe roughly similar to that of the US along with terminal rates above neutral. But we think risks are amplified that markets will price in a faster-and-deeper cutting cycle in Europe.

Inflation is already falling and below-trend growth could raise concerns of a negative output gap. This comes as imported disinflation from China may amplify these concerns. Add in limited scope for fiscal expansion even in negative scenarios and the risk is markets will price in a 'bad news' cutting cycle, which implies a faster pace and below-neutral terminal rate.

EUR/JPY shorts remain our highest conviction trade to express local and global factors. Increasing risks for more dovish ECB pricing contrast with continued focus on the BoJ exiting NIRP. Falling global rates support JPY longs while the EUR may increasingly be used as a funding currency for risk- and carry-trades.

G10 | Balance of payments: Return to normalcy?

Current account balances fluctuate over time and can function as absorbers of temporary shocks. After a pandemic, an energy crisis, and a surge in inflation, we appear to return to more normal times, with low inflation and low(er) interest rates.

Although the empirical relationship between currencies and current account balances is not as straightforward as some theories suggest, the balance of payments (BoP) still provides important information on trade and financial flows between countries. As we "return to normalcy" we discuss which G10 BoP dynamics still deviate from recent historical trends – namely, in Australia, New Zealand, Norway, and Switzerland – and how these fit into current FX themes.

G10 | Too early to trade the US election

The political primary calendar has begun. Client interest in the 2024 presidential election has accordingly increased. However, moves in polling and betting markets have not resulted in a consistent or intuitive impact on G10 currencies. The currencies most highly correlated with fluctuations in polling and betting markets still show very low correlations to any of these metrics and are not directly impacted by change in US economic or foreign policy. The time for political developments to bear on G10 currencies has not yet arrived.

United States

USD | Why has the USD risen less than yield differentials would suggest?

The USD has risen over the past month. However, the USD rally is smaller than might have been expected given where yield differentials imply. One explanation is that market pricing has moved to anticipate a somewhat slower pace of cuts – a relationship we discuss in G10 | Warping the pace-time continuum .

Another potential explanation is that since November 2023, market pricing has moved to imply a swift but moderate pace of cuts not only from the Fed (around four 0.25% cuts over six months) but also from central banks abroad. The USD may struggle to rise in an environment in which inflation is not so hot that it warrants risk-killing restrictive policy rates but also growth is not so weak that market concern rises about a major global recession.

G10 FX Options

G10 | Who's driving, realized or implied volatility?

That volatility exhibits a degree of auto-correlation is by no means unbeknownst to the market. However, the question "why so?" is unclear. Is it because realized volatility drives implied volatility? Or is it because the inverse is true?

We conduct analysis into 1-day realized and 1-day implied volatility across G10 currencies to ultimately find that, indeed, realized volatility drives implied volatility. However, we also find that the inverse is true: implied volatility drives realized volatility.

This creates a negative feedback loop, driving volatility lower over time. We postulate that this makes the volatility inherently complacent. Assuming the probability of a spike in volatility is the same each day, the longer time passes without a spike, the more anomalous that becomes.

In other words, while volatility is driving itself lower over time, the probability of a spike in volatility is increasing. Given the length of time since the last spike in volatility of FX markets, we find long volatility positions cheap.

In particular, we continue to recommend long USD/CHF 10-delta strangles (expiration November 5, 2024) given the current geopolitical and macroeconomic risks.

Morgan Stanley FX Strategy Trade Ideas

Exhibit 64: Morgan Stanley FX Strategy Trade Ideas

Spot trades		Spot	Target		Stop	
Maintain						
Long NOK/SEK		0.9871	1.06	7.4%	0.95	-3.8%
Short EUR/JPY	Top Trade	159.67	145	9.2%	162	-1.5%
Short GBP/NOK		13.4326	12.20	9.2%	14.50	-7.9%
Option trades		Entry/cost/premium received				
Maintain						
Long USD/CHF strangle (0.7775 put, 0.9550 call) expiry Nov 5, 2024 for 0.72%						
Long EUR/GBP 2-week calls at 0.86 strike (expiry February 7) for 0.08%						

Source: Bloomberg, Morgan Stanley Research.

G10 | Warping the pace-time continuum

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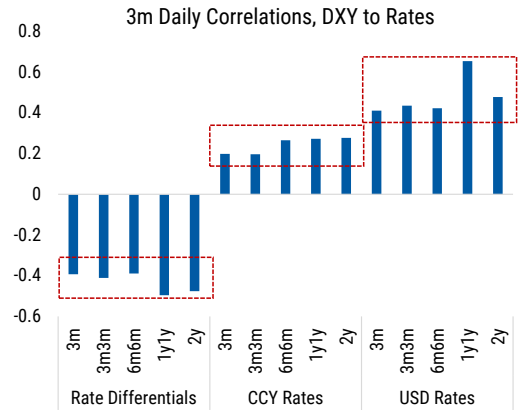
Markets are abuzz with discussions about when central banks around the world will begin cutting rates.

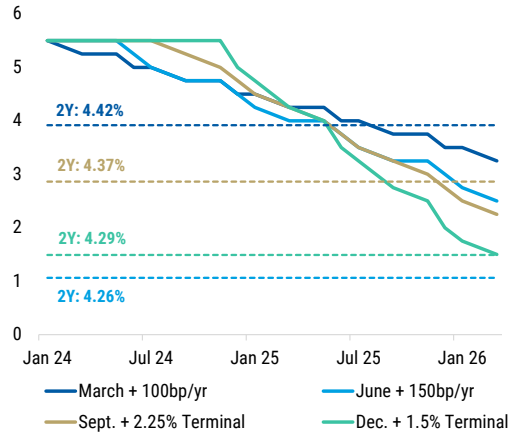
Global central bankers have generally acknowledged that the direction of travel for rates is lower. But many have pushed back on imminent normalization of rates. President Lagarde said March was too early, as did Chair Powell and Governor Macklem. Meanwhile, the Riksbank seems increasingly comfortable with a March cut.

Exhibit 65: Currencies are generally equally sensitive to different parts of short-end rates



Source: Bloomberg, Morgan Stanley Research

Exhibit 66: 2y rates are more sensitive to changes in the pace of cuts and terminal rate than the timing of the first cut



Source: Macrobond, Morgan Stanley Research

So *when* will central bankers first begin cutting? It may be controversial to say, but we'd argue that the timing of the first cut is the least-important element of the rate normalization process for currencies.

Rather, it's the *how* fast and *how* deep that are far more critical for rates and thus currencies. Figuring out the *how* requires understanding *why* central bankers are cutting in the first place.

First, why is the timing less important? Because the pace of cuts and terminal rate are more impactful on the 2y rate than the timing of the first rate cut. Exhibit 65 shows that the correlation coefficients for the DXY versus US rates, DXY-weighted foreign rates and rate differentials are all relatively similar for different parts of the front-end, a pattern found for other currencies as well.

Because currencies are generally equally sensitive to different parts of the short-end yield curve, it's less about precisely what pushes rates lower (the timing of the cut, the pace of cuts, the terminal rate) - it's about what gets rates generally the lowest.

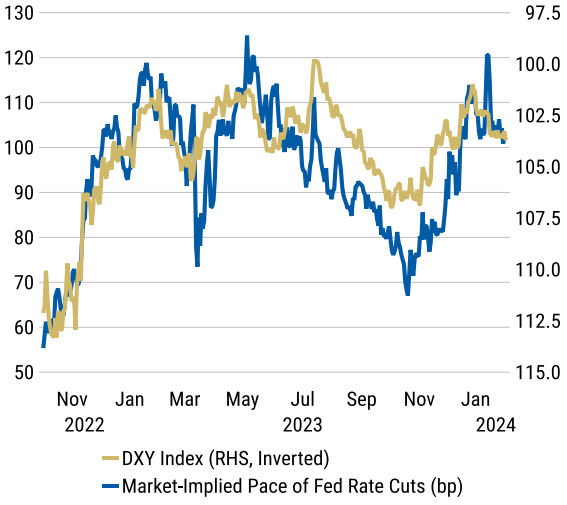
And 2y rates are generally more sensitive to changes in the pace of cuts and terminal rate rather than the timing of the first cut. Exhibit 66 shows four potential US cutting paths as well as the implied 2y rate (which we assume is the average of short rates over that 2-year period):

- A March 2024 cut at a pace of -100bp of cuts per year
- A June 2024 cut at a pace of -150bp of cuts per year
- A September 2024 cut followed by -25bp at every subsequent meeting to a 2.25% terminal rate
- A December 2024 cut followed by -400bp of cuts to a 1.5% terminal rate

Of course, there are varied other combinations of start points, paces and termini we could show. But the point is that even significant changes in the timing of the first cut can be overwhelmed by the pace of cuts and terminal rate.

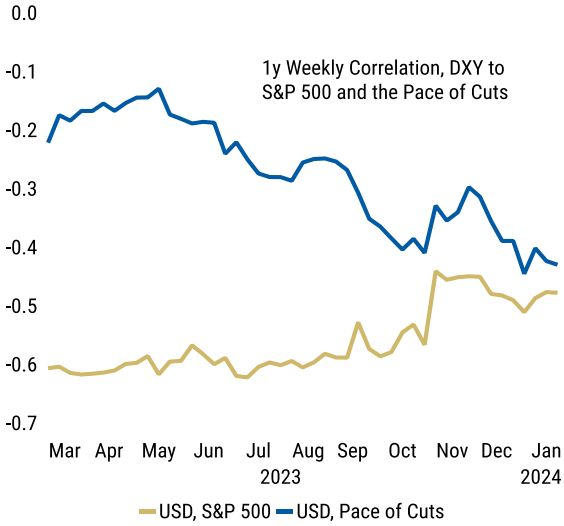
The importance of the pace of cuts for currencies is clear. Exhibit 67 shows that the USD has been trading closely to the market-implied pace of cuts, while Exhibit 68 shows that the correlation of the DXY to changes in the implied pace of cuts has been strengthening, nearly reaching the same correlation as risk assets.

Exhibit 67: The USD has been trading closely with the pace of Fed cuts implied by the market



Source: Macrobond, Morgan Stanley Research

Exhibit 68: The correlation of the USD to the pace of rate cuts has been strengthening



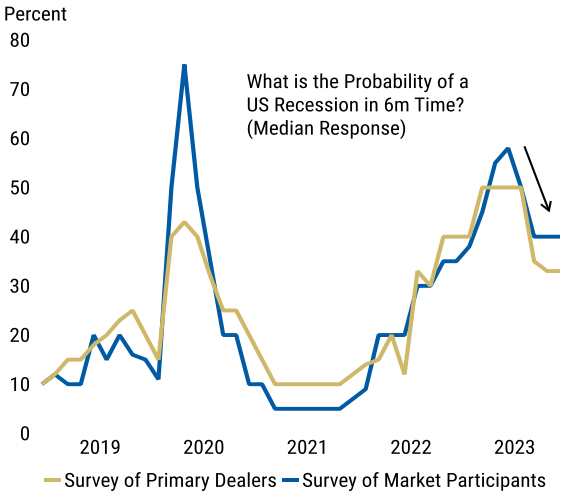
Source: Macrobond, Morgan Stanley Research

If the pace and terminal rate matter so much more, then what determines those? This is where the *why* of cuts is so important. Cutting for different reasons can generate significant differences in pace and termini. Divergence in growth prospects, inflation trends and conditional fiscal outcomes could generate these differences, catalyzing significant cross-FX movements.

The Fed appears to be signalling rate cuts for arguably 'good' reasons. Growth has remained robust and largely exceeded expectations, while investors are increasingly repricing the risk of recession lower (Exhibit 69). The absence of a recession has not failed to blunt the fall in inflation, though, enabling the Fed to begin mulling a removal of policy restrictiveness (Exhibit 70).

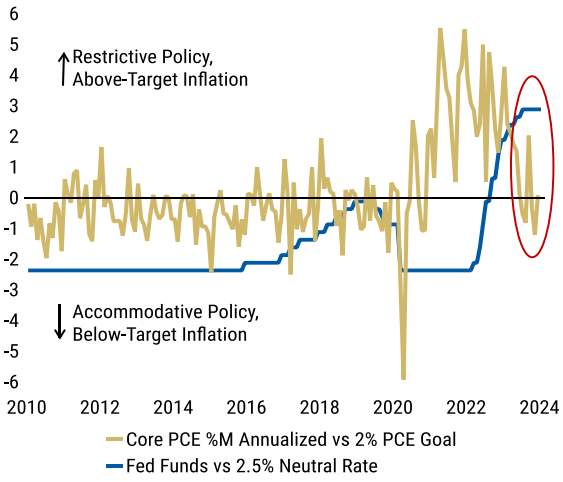
Cutting rates for benign reasons suggests a gradual and cautious pace as well as a terminal rate around neutral - a 'soft landing'. If growth and inflation get too hot, the Fed can slow the pace of cuts or pause. If data slow, it can speed up the pace to reach neutral faster. But ultimately the Fed so far appears to have little urgency to change policy, nor does it appear to feel 'behind the curve'.

Exhibit 69: Investors are decreasingly concerned about an incoming US recession



Source: FRBNY, Macrobond, Morgan Stanley Research

Exhibit 70: Disinflation can allow the Fed to begin considering rate cuts



Source: Macrobond, Morgan Stanley Research

Not every central bank may be so lucky. What if data are sufficiently weak to generate meaningful disinflation - so much so that central bankers are increasingly worried about risks from deflation rather than above-target inflation? These central banks might find themselves 'behind the curve', requiring a less gentle pace of rate normalization and perhaps below-neutral terminal rates.

This is particularly the case if fiscal policy is viewed as sticky. Fiscal policy is an alternative option to arrest weakening growth and can raise aggregate demand, limiting a widening output gap. But if fiscal policy is constrained by institutional restrictions, then conditioned on negative growth outcomes, fiscal policy may be unable to help as much. This puts more pressure on monetary policy to 'save the day'.

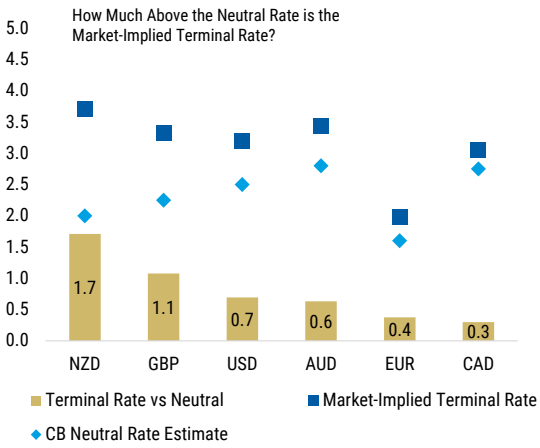
We think markets are underpricing these risks, particularly in Europe.

Growth remains weak and inflation is continuing to trend down at an almost-alarming pace. Additional disinflationary pressures from China, coupled with ongoing passthrough of monetary tightening and below-trend growth, could amplify concerns among central bankers about the 'downside' of their 2% inflation targets, particularly if demand is seen as falling below supply (output gap).

With European fiscal policy largely constrained - in the Eurozone by the Stability and Growth Pact, in the UK by desires to maintain long-run fiscal sustainability - negative growth outcomes are more likely to be the remit of central bankers. Other areas like the US and the dollar bloc arguably have more willingness and ability to limit growth weakness via the fiscal channel.

Are markets pricing this risk? Not particularly. Exhibit 71 shows the market-implied terminal rate (proxied by the 2y1y OIS rate) versus the central banks' estimates of neutral. Of course, neutral rates are unobservable, estimates have wide confidence bands, and reasonable people can disagree.

Exhibit 71: Market-implied terminal rates remain above central bank neutral rate estimates, implying ample scope for markets to price in deeper cuts



Source: Macrobond, Morgan Stanley Research

Exhibit 72: 3m daily correlations, CCY/CCY to 2y rate differentials

	USD	EUR	JPY	GBP	CAD	AUD	NZD	CHF	NOK	SEK
USD		0.45	0.64	0.41	0.14	0.56	0.43	0.40	0.42	0.31
EUR	0.45		0.59	0.57	0.45	0.45	0.55	0.45	0.39	0.18
JPY	0.64	0.59		0.51	0.61	0.50	0.50	0.51	0.49	0.23
GBP	0.41	0.57	0.51		0.37	0.31	0.37	0.32	0.32	0.24
CAD	0.14	0.45	0.61	0.37		0.60	0.52	0.40	0.48	0.26
AUD	0.56	0.45	0.50	0.31	0.60		0.52	0.29	0.27	0.14
NZD	0.43	0.55	0.50	0.37	0.52	0.52		0.19	0.44	0.28
CHF	0.40	0.45	0.51	0.32	0.40	0.29	0.19		0.37	0.00
NOK	0.42	0.39	0.49	0.32	0.48	0.27	0.44	0.37		0.23
SEK	0.31	0.18	0.23	0.24	0.26	0.14	0.28	0.00	0.23	

Source: Macrobond, Morgan Stanley Research

But the point is in no case do markets appear to be pricing in a significant risk of rates going to, or below, neutral. This means that there is scope for rates to continue pricing in both a faster pace of cuts and a deeper terminal rate - regardless of when the first cut ultimately comes.

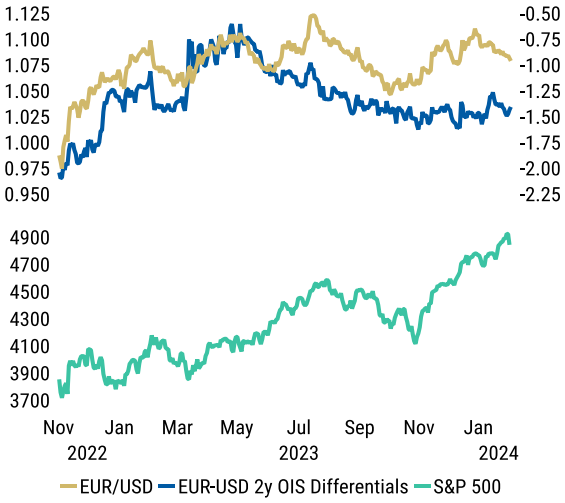
Here's where the timing of the first cut *does* matter. It could be an important catalyst for markets to begin pricing that faster-and-deeper cycle. This is for two reasons. First, the conditions under which central banks are finally cutting would be made clear. Is it a 'benign' cutting cycle, or one that feels like 'catch-up'?

Second, the act of cutting rates is a strong implicit signal of intent. The bar for the first cut (or hike) is typically the highest. If a central bank is convinced enough to begin the cycle, odds are that conviction implies at least a few more rate moves. So it's an opportunity for markets to continue to price lower the risk of rising rates and, in turn, amplify the risks of rates falling faster and deeper than a base case might imply.

In sum, we think 'policy divergence' could be an increasingly important FX theme in the coming months. For most central banks, with the exception of the BoJ, the directionality for rates is likely lower. But differences in how markets price the pace and depth of the cutting cycle should be an important determinant of relative currency performance. The correlation of most G10 crosses in general to short-rate differentials is relatively high across the board (Exhibit 72).

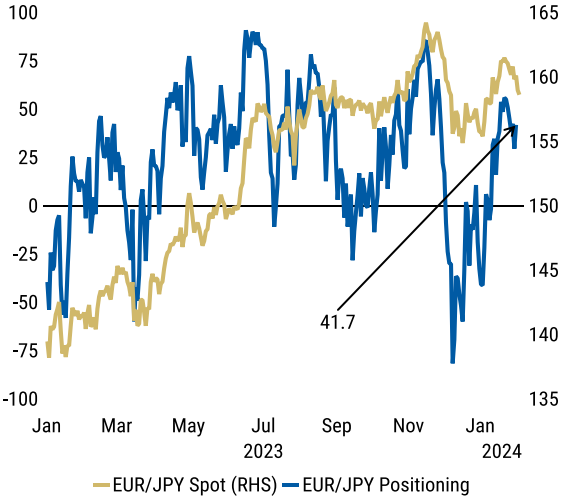
It might not matter as much for the USD because risk assets play such an important role in driving the USD. Indeed, EUR/USD has diverged from EU-US 2y rate differentials, with the EUR/USD gyrations explained chiefly by movement in the equity market (Exhibit 73).

Exhibit 73: EUR/USD has deviated from rate differentials due to the USD's sensitivity to risk assets



Source: Macrobond, Morgan Stanley Research

Exhibit 74: Positioning is long EUR/JPY, suggesting ample scope for a correction lower in EUR/JPY



Source: Macrobond, Morgan Stanley Research

But for cross trades, particularly those with relatively high correlations to rate differentials and lower sensitivities to equities, the faster-and-deeper theme could prove quite important.

Stay short EUR/JPY: EUR/JPY is arguably the best expression of both local and global stories. Locally, ECB-BoJ policy convergence seems increasingly likely, and we think Europe remains one of the most likely candidates for markets to price in a faster-and-deeper cycle, contrasting with the BoJ where the risk is for higher rates, not lower ones.

Globally, we think the outlook for rates and risk favours the pair lower. JPY is a highly rate-sensitive currency and a global bull market for duration suggests JPY strength. Meanwhile, falling rates globally may keep risk appetite buoyed. We think this year investors may increasingly focus on EUR as a funding currency for carry trades and to sell against risk-sensitive currencies.

Finally, technicals remain favorable. Positioning is long EUR/JPY, not short (Exhibit 74) and momentum indicators are relatively neutral.

Trade idea: Maintain short EUR/JPY at 159.67 with a target of 145 and a stop of 162

G10 | Balance of payments: Return to normalcy?

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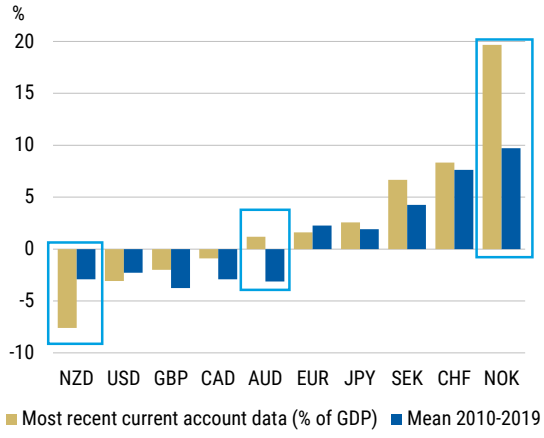
Current account balances fluctuate over time and can function as absorbers of temporary shocks. After a pandemic, an energy crisis, and a surge in inflation, we appear to return to more normal times, with low inflation and low(er) interest rates.

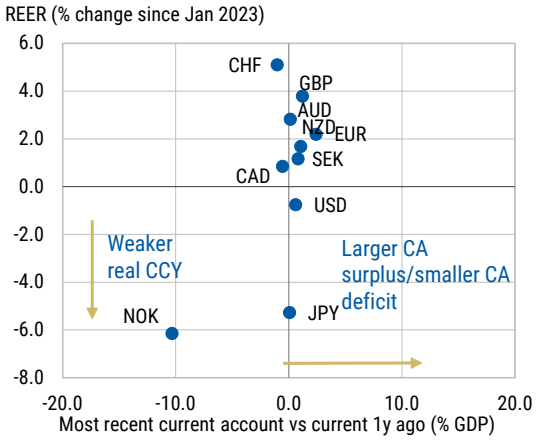
We discuss how the balance of payment dynamics in Australia, New Zealand, Norway, and Switzerland still deviate from recent historical trends and what this could imply for their exchange rates.

Exhibit 75: Current accounts in Australia, New Zealand, and Norway still deviate from recent historical trends



Source: Macrobond, Morgan Stanley Research

Exhibit 76: The relationship between the current account and FX is in practice often more nuanced and different than some theories may suggest



Source: Macrobond, Morgan Stanley Research

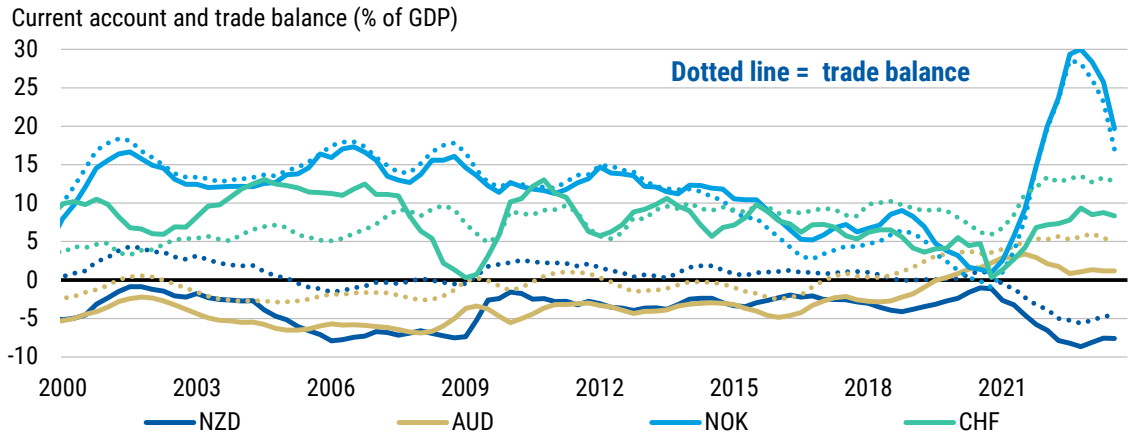
Exhibit 75 and Exhibit 77 illustrate how the energy shock after the invasion of Ukraine continues to boost Norway's trade surplus. Similarly Australia and Switzerland have had unusually large trade surpluses, boosted by commodity prices in the case of Australia and strong goods exports in the case of Switzerland.

Meanwhile in New Zealand, the post-pandemic recovery fueled a record-high current account deficit, as New Zealand's trade balance flipped into a deficit for the first time since the mid 2000s.

The current account provides important information on trade and income flows between countries. However, for FX investors who are more interested in the rate of change as opposed to levels of the exchange rate, the financial account contains more important information than the current account. We therefore turn our attention to temporary and more structural changes to the financial accounts of Australia, New Zealand, Norway, and Switzerland.

For a more in-depth explanation of why the interplay between the current account and currencies is in practice often more nuanced and different than some theories may suggest, please see Will the US Current Account Deficit Lead to a Weaker USD?

Exhibit 77: Current account and trade balances for Australia, New Zealand, Norway, and Switzerland in recent decades



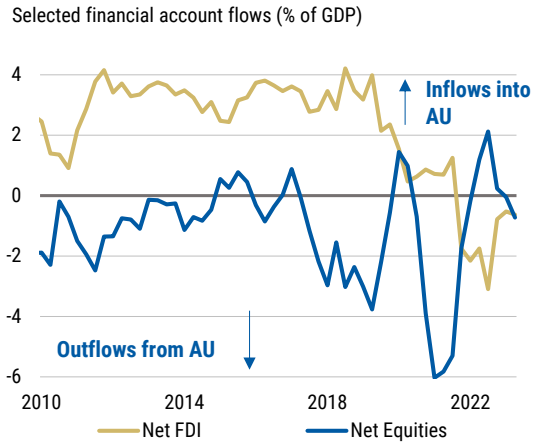
Source: Macrobond, Morgan Stanley Research

Australia

In Australia, foreign direct investment (FDI) used to be one of the main ways the country financed its current account deficits. FDI tends to be a more stable flow of funds than other components of the financial account. However, there appears to be a structural decline in FDI, which coincides with a peak in the property sub-index of the Hang Seng.

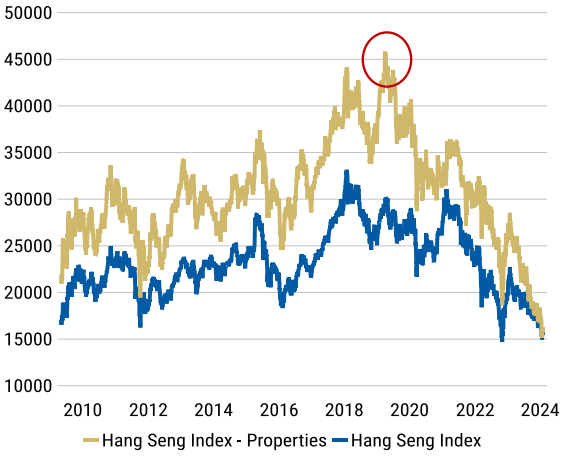
Our China economists continue to stress the structural problems that China will face in the coming years to reflate its economy. This trend suggests that Australia – which usually runs current account deficits due to a structurally low savings rate – will have to finance its deficits through more volatile forms of capital, which could potentially make AUD a more volatile currency longer term.

Exhibit 78: FDI flows have failed to recover in Australia...



Source: Macrobond, Morgan Stanley Research

Exhibit 79: ...which coincides with a peak in Hang Seng property index

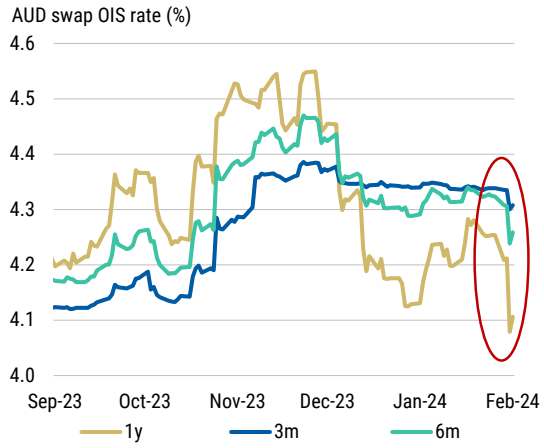


Source: Bloomberg, Macrobond, Morgan Stanley Research

In addition to potentially more structural volatility, we may see some increased AUD volatility in the very near term, namely, into the RBA meeting on February 6 (local time).

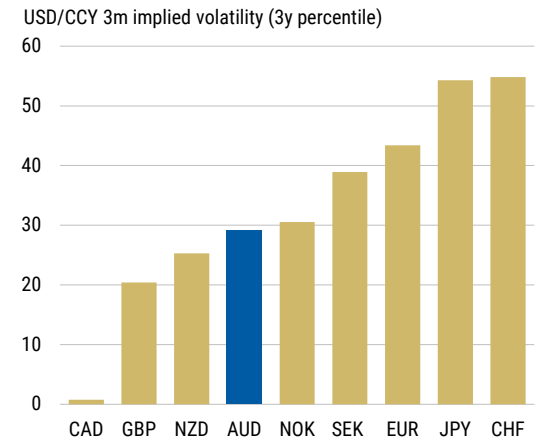
After the recent miss in 4Q CPI, Australian rate expectations declined sharply. However, our economist sees the bar for a broader pivot to easing to be relatively high and continues to expect no rate cut from the RBA in 2024 (for more commentary on FX vol see G10 | Balance of payments: Return to normalcy? and USD Outlook).

Exhibit 80: AUD rate expectations fell sharply after a downside surprise in 4Q CPI



Source: Macrobond, Morgan Stanley Research

Exhibit 81: Vol is low from a historical perspective

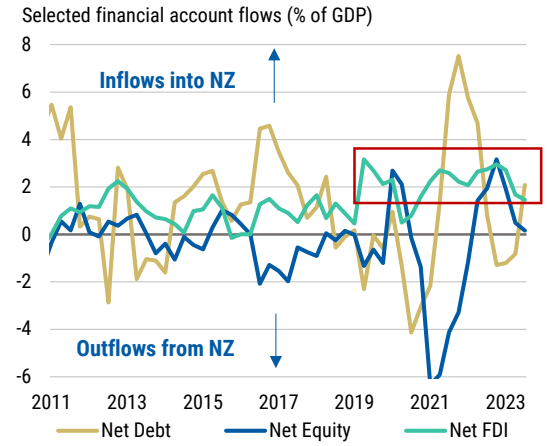


Source: Macrobond, Morgan Stanley Research

New Zealand

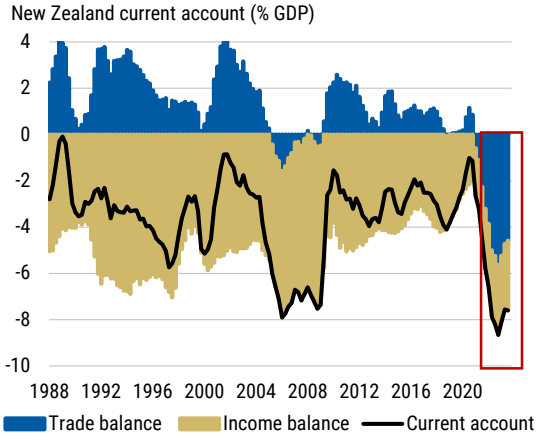
Unlike in Australia, FDI has remained more stable, likely related to the fact that the exposure to China is slightly smaller than in Australia. We also observe that equity and debt flows are returning to their historical trends, and hence see limited implications for the exchange rate.

Exhibit 82: FDI inflows have remained more stable in New Zealand



Source: Macrobond, Morgan Stanley Research

Exhibit 83: New Zealand has consistently run a current account deficit over the past 30 years, mainly due to a primary income deficit



Source: Macrobond, Morgan Stanley Research

In the case of New Zealand, the specifics of its current account are worth pointing out. The country has consistently run a current account deficit over the past 30 years, mainly due to a primary income deficit. However, post-Covid, the trade balance turned into a deficit as well, driven by a strong domestic demand and expansionary fiscal policy.

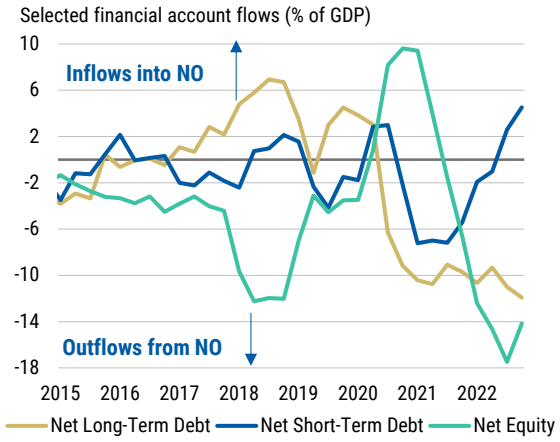
The current domestic economic slowdown should reduce the trade deficit. Returning to a current account deficit that has mainly explained the income balance suggests that the (weak) NZD current account relationship should weaken even further, as the cashflows from the income balance, which are mainly generated by foreign companies in New Zealand, get to a large extent reinvested into the economy.

Norway

As an energy exporter facing an increase in energy prices, theory would point to NOK appreciating. However, as we pointed out in the above-mentioned note, real rates matter more for FX than trade dynamics.

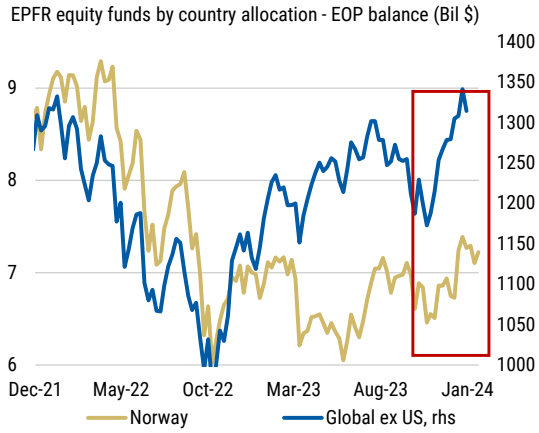
With regards to the financial account, equity outflows have accompanied the trade surplus. We will pay attention to equity inflows outside the US – a recent trend that may continue if markets continue to trade the soft-landing narrative. While such flows may not have a direct impact on NOK, they may be a sign that investors are adding risk exposure, and therefore indirectly benefit NOK.

Exhibit 84: Norway's trade surplus has been accompanied by a decline in net equities of the financial account



Source: Macrobond, Morgan Stanley Research

Exhibit 85: High frequency equity fund allocations suggest an inflow into Norway and other countries outside the US

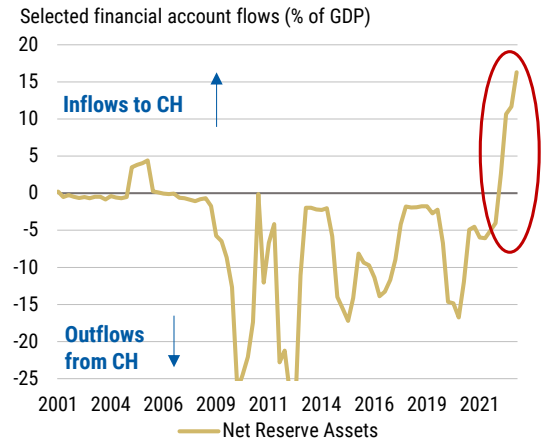


Source: Bloomberg, Macrobond, Morgan Stanley Research

Switzerland

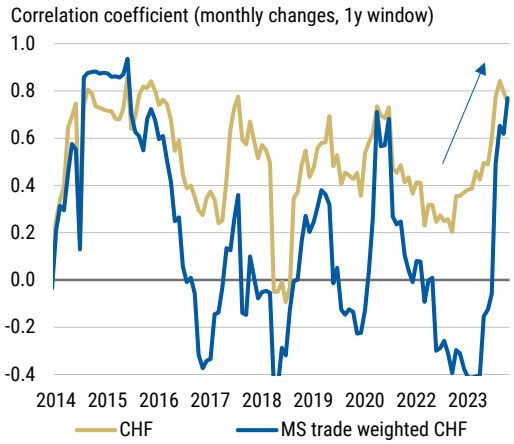
The main change in the Swiss financial account has been the composition: reserve assets used to be a source of outflows from Switzerland in the financial account, but they were a driver of capital inflows in recent quarters. The reserve assets in the financial account do not only cover the FX reserves of the SNB, though they are a large part of it.

Exhibit 86: Switzerland continues to run a financial account deficit, but the composition has changed as reserve assets turned into an inflow



Source: Macrobond, Morgan Stanley Research

Exhibit 87: CHF's sensitivity to changes in SNB's FX reserves has increased



Source: Bloomberg, Macrobond, Morgan Stanley Research

We recently wrote about the possibility that the SNB has started selling CHF in December, and noted that ultimately inflation will determine the extent to which the SNB will start selling CHF.

If global inflation continues to come down as rapidly as it did over the past months, we may see larger moves in CHF given the current elevated correlation to changes in reserves.

G10 | Too early to trade the US election

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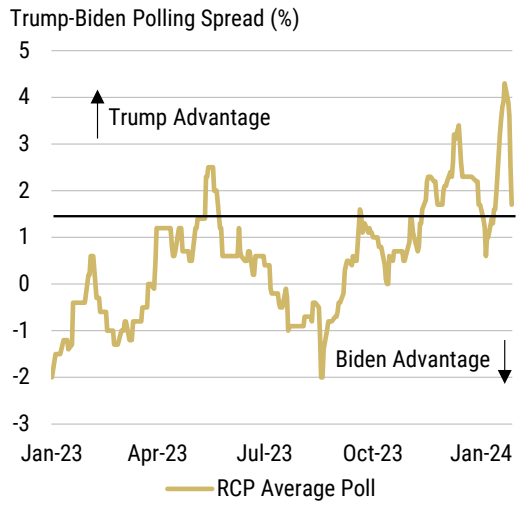
The political primary calendar has begun. Client interest in the 2024 presidential election has accordingly increased.

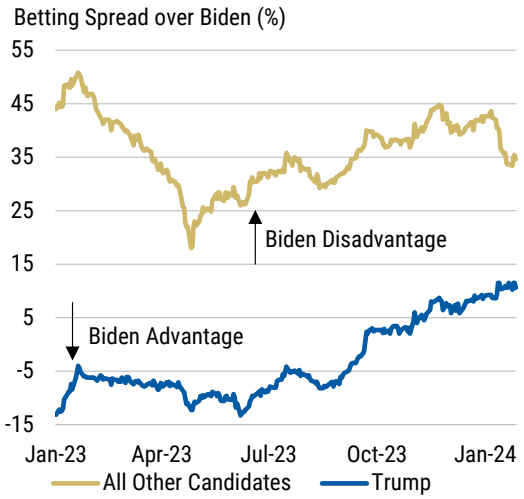
President Biden's polling advantage over former President Trump has declined in recent months (Exhibit 88). And the presidents's betting market-implied likelihood of re-election has declined over the same period (Exhibit 89).

Exhibit 88: Polling numbers...



Source: Real Clear Politics, Bloomberg

Exhibit 89: ...and betting markets have moved in recent months



Source: Real Clear Politics, Bloomberg

However, these moves in polling and betting markets have not resulted in a consistent or intuitive impact on G10 currencies.

The currencies most highly correlated with fluctuations in polling and betting markets still show very low correlations to any of these metrics and are not directly impacted by change in US economic or foreign policy.

Exhibit 90: PLN, INR and ZAR have been most highly correlated to election developments...

USD/CCY Correlation	RCP Average Poll (Trump over Biden)	RCP Betting Average (Trump over Biden)	RCP Betting Average (All Candidates over Biden)	Average
INR	0.121	0.090	0.136	0.116
ZAR	0.107	0.133	0.102	0.114
PLN	0.090	0.089	0.111	0.097
CHF	0.047	0.067	0.154	0.090
GBP	0.064	0.054	0.122	0.080
NOK	0.047	0.068	0.117	0.078
CAD	0.032	0.108	0.091	0.077
MXN	0.041	0.105	0.048	0.065
EUR	0.041	0.060	0.089	0.064
GBIEMFX	0.050	0.068	0.067	0.062
AUD	0.059	0.076	0.048	0.061
SEK	0.046	0.038	0.094	0.059
COP	-0.041	0.019	0.167	0.049
Dollar Index	0.056	0.033	0.053	0.048
NZD	0.016	0.069	0.051	0.045
JPY	0.064	0.017	0.055	0.045
BRL	0.015	-0.014	-0.063	-0.021
KRW	-0.047	-0.062	-0.044	-0.051
CNH	0.004	-0.070	-0.129	-0.065
TWD	-0.040	-0.065	-0.103	-0.069

Source: Real Clear Politics, Bloomberg

Exhibit 91: ...while regression betas have been relatively subdued

USD/CCY Regression Beta	RCP Average Poll (Trump over Biden)	RCP Betting Average (Trump over Biden)	RCP Betting Average (All Candidates over Biden)	Average
ZAR	0.31%	0.17%	0.09%	0.19%
PLN	0.19%	0.08%	0.09%	0.12%
NOK	0.11%	0.07%	0.09%	0.09%
MXN	0.10%	0.10%	0.04%	0.08%
AUD	0.12%	0.07%	0.03%	0.07%
GBP	0.09%	0.04%	0.06%	0.06%
SEK	0.09%	0.04%	0.06%	0.06%
CHF	0.06%	0.05%	0.07%	0.06%
JPY	0.13%	0.01%	0.03%	0.06%
EUR	0.05%	0.04%	0.04%	0.04%
GBIEMFX	0.06%	0.04%	0.03%	0.04%
Dollar Index	0.08%	0.02%	0.02%	0.04%
CAD	0.03%	0.06%	0.03%	0.04%
NZD	0.03%	0.06%	0.03%	0.04%
INR	0.07%	0.02%	0.02%	0.04%
COP	-0.13%	0.03%	0.17%	0.02%
BRL	0.05%	-0.02%	-0.04%	0.00%
CNH	-0.01%	-0.03%	-0.03%	-0.03%
TWD	-0.05%	-0.02%	-0.03%	-0.04%
KRW	-0.15%	-0.05%	-0.03%	-0.08%

Source: Real Clear Politics, Bloomberg

Exhibit 90 shows the correlations of moves in G10 currencies to a sample of daily changes in polling and betting data starting in September 2023, which is around when former President Trump established a significant lead above his Republican primary competitors in election betting markets.

Unlike MXN, KRW, TWD, or CNH (economies that might plausibly be affected by change in US executive branch policies), the currencies most correlated to likely election outcomes are INR, PLN, and ZAR.

This result comports with our experience. In our EM strategy colleagues' recent conversations with investors, topics including carry, near-shoring, and remittances have dominated discussions around MXN-dominated conversations in 2023. This year, clients have begun to ask about the 2024 election but generally agree that it's too early to trade the outcome in any way. This dynamic may change as the US election approaches, but the time for political developments to bear on G10 currencies has not yet arrived.

USD | Why has the USD risen less than yield differentials would suggest?

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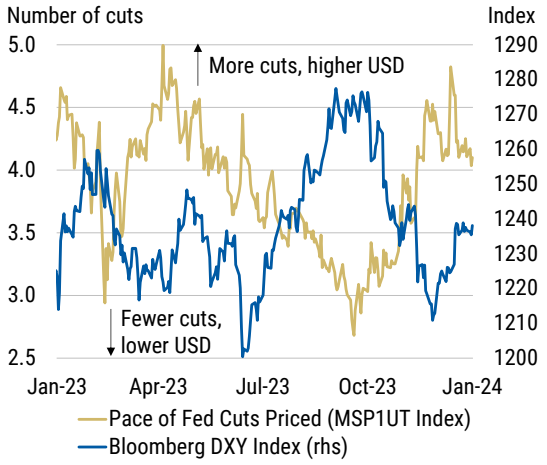
Over the past year, **the US dollar has traded broadly in line with the market-implied pace of Fed cuts.** The yellow line in Exhibit 79 shows the number of cuts markets have priced during the six months after the Fed is priced to reach its terminal rate.

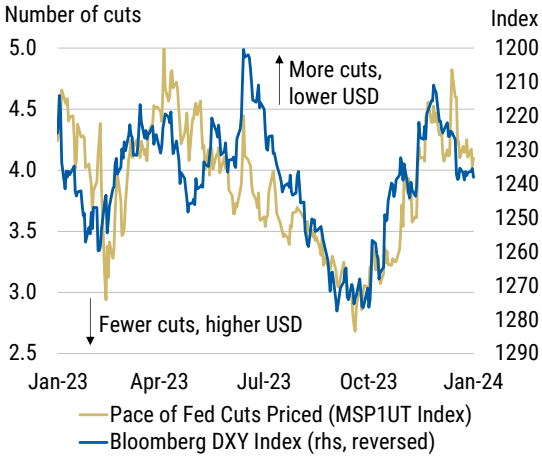
Exhibit 80 shows the same chart, but with the right axis reversed. The chart illustrates that the USD has risen as fewer (or a slower pace of) cuts are priced, and fallen as more (or a faster pace of) cuts are priced.

Exhibit 92: The USD has shown...



Source: Bloomberg, Morgan Stanley Research

Exhibit 93: ...a clear relationship to the pace of Fed cuts priced



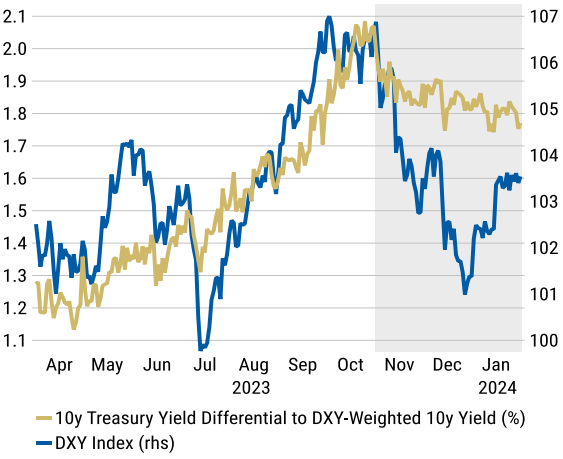
Source: Bloomberg, Morgan Stanley Research

As a result, we expect that the *timing* of the first Fed cut (whether in March, May, or June) will have less impact on the USD than whether the Fed is expected to cut quickly or slowly once it starts cutting. We discuss this dynamic in G10 | Warping the pace-time continuum .

The USD has risen over the past month. However, the USD rally is smaller than might have been expected given where yield differentials imply (Exhibit 94 and Exhibit 95).

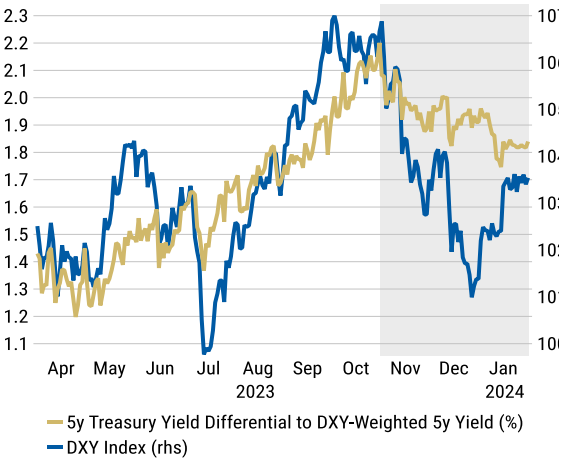
One explanation is evident from above – market pricing has moved to anticipate a somewhat slower pace of cuts.

Exhibit 94: The USD trades...



Source: Bloomberg, Macrobond, Morgan Stanley Research

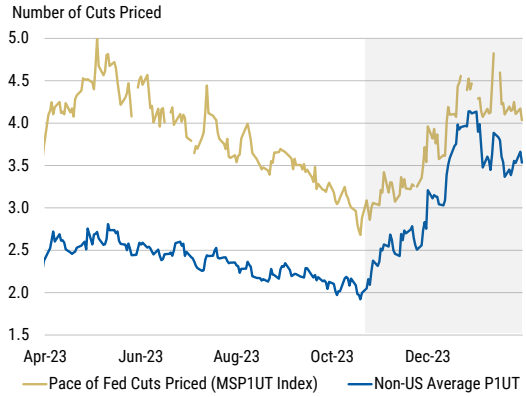
Exhibit 95: ...below where yield differentials would imply



Source: Bloomberg, Macrobond, Morgan Stanley Research

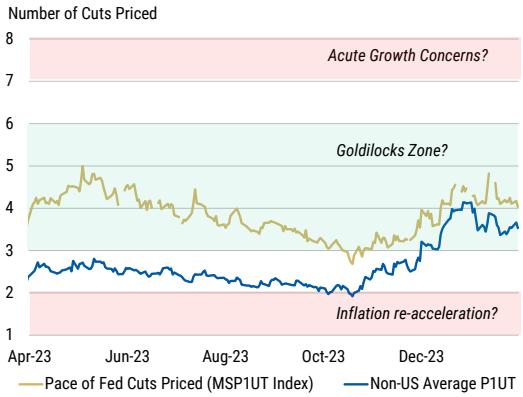
However, another potential explanation is that since November, market pricing has moved to imply a swift but moderate pace of cuts not only from the Fed (around four 0.25% cuts over six months) **but also from central banks abroad.**

Exhibit 96: The pace of cuts implied by pricing of other central banks has risen



Source: Bloomberg, Morgan Stanley Research

Exhibit 97: Not too fast, not too slow



Source: Bloomberg, Morgan Stanley Research

A four-cuts-over-six-months pace of cuts is consistent with a goldilocks-type outcome: inflation is falling but growth is not falling fast enough to warrant pricing multiple back-to-back 50bp cuts.

Over the past three months, markets have moved to price in a goldilocks scenario not only in the US, but also in the rest of the world (blue line in Exhibit 97).

The implication is that a very large number of cuts priced (i.e., P1UT at 8, or 9) would probably be emblematic of rising serious growth concerns. For example, a major financial crisis, a hard landing in the US that could spill over to a global recession, etc. These scenarios would likely be risk demand negative and USD positive.

On the flip side, a very low number of cuts priced (i.e., P1UT at 1) would probably be emblematic of rising inflation concerns. For example, a strong reacceleration in inflation that causes the Fed and other central banks to keep rates restrictive for a long period of time. That scenario would likely be risk demand negative and USD positive.

However, the middle path (i.e., P1UT from 3-5 in the US and abroad) would probably be emblematic of falling inflation but relatively decent growth in the US and abroad. This scenario would probably keep risk demand supported and be USD negative relative to yield differentials.

G10 | Who's driving, realized or implied volatility?

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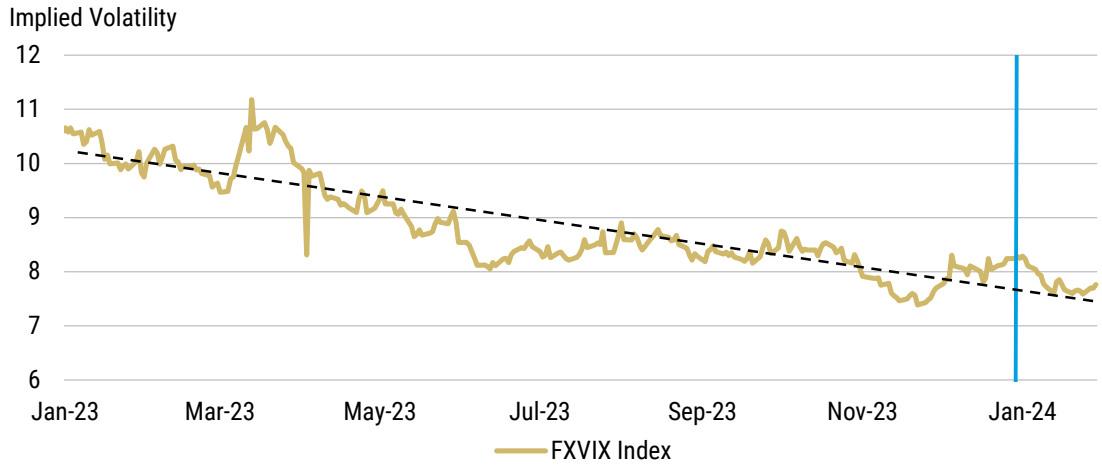
Both. And maybe neither.

Into the start of 2024, volatility in FX markets has continued its downward trend established in 2023 (Exhibit 98).

Exhibit 98: The FXVIX Index, which represents a weighted average of 3m implied FX volatility of the most-traded G10 and EM FX pairs, has been steadily trending downwards



Source: Bloomberg, Morgan Stanley Research

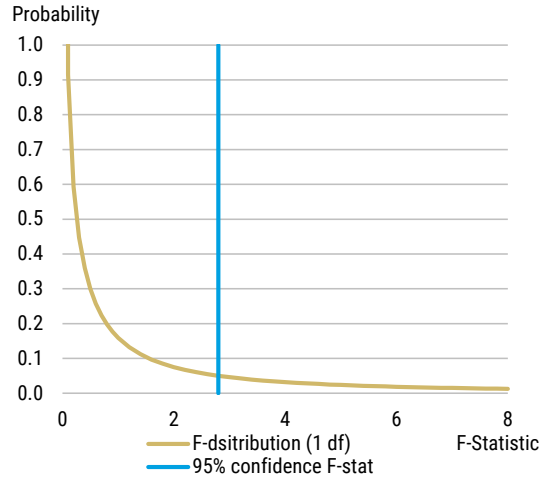
However, geopolitical and macroeconomic risks can still be found in abundance. Not only are we witnessing conflicts that could potentially result in supply-chain disruptions, but central banks globally are still toeing the line between over- and under-tightening as a result of previous crises.

So why is implied volatility still selling off? We take a closer look at realized and implied volatility, answering 3 questions in an attempt to better understand the dynamics at play.

- Does realized volatility drive implied volatility?
- Does implied volatility drive realized volatility?
- Does realized volatility drive itself?

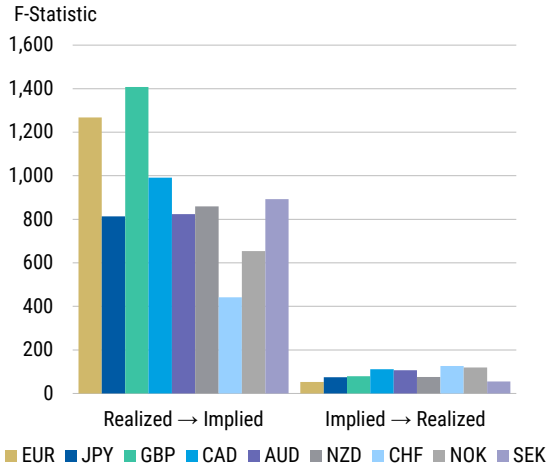
To answer the first two questions, we test for Granger-causality between 1-day realized and 1-day implied volatility across G10 currencies (see appendix for further details about the statistical methods involved).

Exhibit 99: Probability distribution function of an F-test with one degree of freedom



Source: Morgan Stanley Research

Exhibit 100: F-tests show that across G10, realized volatility drives implied volatility **and** vice versa



Source: Bloomberg, Morgan Stanley Research

Running the test across all G10 currencies with realized volatility lagged by 1 day, we find that realized volatility Granger-causes implied volatility across the board (Exhibit 100). The tests yield F-Statistic numbers significantly in excess of the 5% confidence level of 2.8 (given 1 degree of freedom).

Having concluded that realized volatility does Granger-cause implied volatility, the question then turns to whether implied volatility also drives realized volatility.

While this may seem paradoxical on the basis that if they both drive each other the result will be a never-ending feedback loop, evidence does suggest it is true.

Using the same method, but with an increased lag of 2 days (so that the same day is concerned), the resulting F-statistics force us to reject the null-hypothesis that implied volatility does not Granger-cause realized volatility as well.

While Exhibit 100 may misleadingly lead some to conclude that realized volatility has a greater impact on implied volatility in magnitude than vice versa, that is not the case.

What Exhibit 100 does show (even after considering the increased degrees of freedom for the second set of tests) is simply that there is more confidence about the influence from lagged realized volatility on implied volatility (Exhibit 101) than vice versa (Exhibit 102).

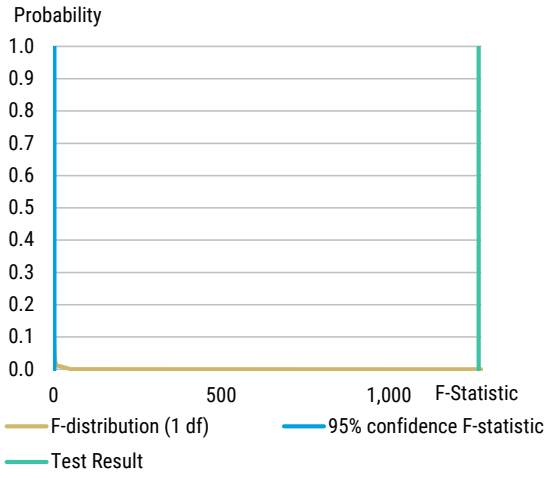
In other words, the impact of realized on implied is *clearer* than implied on realized – not *greater*.

If realized volatility drives implied volatility, which in turn drives realized volatility, does that mean realized volatility drives itself?

Yes and no.

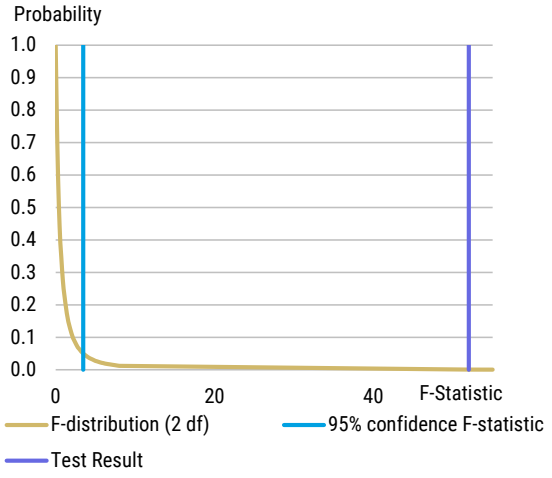
While Granger causality cannot be used here, as Granger causality uses an autoregressive model as the baseline, a look into this baseline autoregressive model is revealing.

Exhibit 101: The test results of realized volatility Granger-causing implied volatility imply great confidence



Source: Bloomberg, Morgan Stanley Research

Exhibit 102: As do the results for implied volatility Granger-causing realized volatility



Source: Bloomberg, Morgan Stanley Research

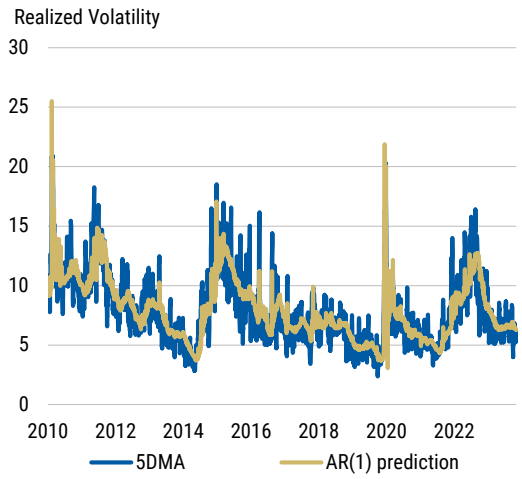
Using a simple AR(1) (autoregressive with one lagged variable of itself) model for EUR/USD volatility trained on a rolling window to predict values one day ahead, it becomes evident that while not perfect, realized volatility is self-influencing (Exhibit 103).

This, however, by no means makes it a good predictor on its own. Calculating the root mean squared error (RMSE) for this EUR/USD AR(1) realized volatility model yields a value of 2, much too great for an effective volatility model.

It is, however, indicative of a market that has a tendency to trend.

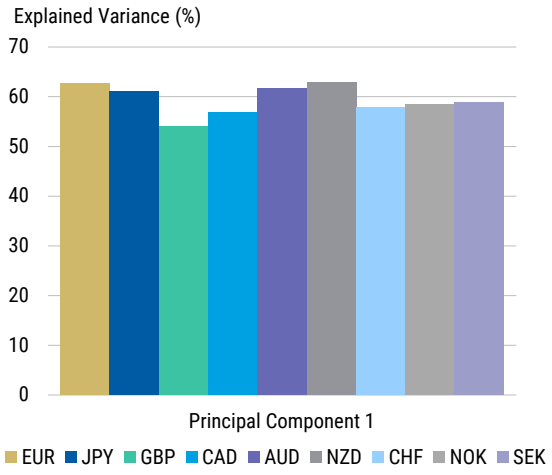
So what is ultimately driving volatility? The above analysis suggests it is undeniable that realized and implied volatility influence one another.

Exhibit 103: A simple AR(1) model predicts 1-day ahead realized EUR/USD volatility seemingly well



Source: Bloomberg, Morgan Stanley Research

Exhibit 104: Across all G10 currencies, the respective realized and implied volatility are largely explained by 1 factor



Source: Bloomberg, Morgan Stanley Research

When conducting principal component analysis (PCA), we see that a majority of the variance in realized and implied volatility is explained by one underlying factor (Exhibit 104). That factor may be realized volatility, or it may be something else that influences realized volatility, which in turn influences implied volatility.

Which of these two hypotheses is more accurate is unclear. However, what seems to be clear is that either by nature or by nurture (i.e., because the market thinks it should be so), volatility influences itself and results in a market that, bar shocks, likes to trend.

What does this mean for the volatility market? That it is inherently complacent.

In the absence of external catalysts, volatility is subject to a negative feedback loop. A decrease in realized volatility, driving a decrease in implied volatility, again driving a decrease in realized volatility, resulting in a trend.

However, at the same time, the probability of a volatility spike is increasing. Not because one day without a spike increases the probability of a spike on the next day, but because as time passes and the window of opportunity for a spike increases, and thus so does the likelihood.

The longer time passes without a spike in volatility, the more anomalous it becomes.

Hence, while volatility is driving itself lower over time, in reality the likelihood of a volatility spike is increasing.

Given the length of time since the last volatility spike in FX, we think long volatility positions look cheap. In particular, we like long USD/CHF 10-delta strangles given the current geopolitical and macroeconomic risks.

Trade idea: Maintain long USD/CHF 10-delta strangle (expiry Nov 5, 2024) at 0.72%

Appendix

Causality and correlation are two phenomena often incorrectly used interchangeably. Identifying causality, as opposed to correlation can be a difficult task.

Ideally, causality is identified in the same way clinical tests are conducted. Data are gathered from two "experiments" where one is exposed to the causal variable being tested, the other not, and the differences in outcomes are studied.

However, it is impossible to have implied or realized volatility data in a vacuum, particularly given the data being analyzed are a historical time series. Instead, we use Granger causality tests.

In simplified terms, the Granger causality test identifies whether lagged variables of an explanatory time series provide statistically significant additional value in forecasting the target time series.

This is achieved by comparing forecasted values using the explanatory variable and forecasted values based solely on past values of the target series, to the actual values of the target series.

If successful, the explanatory variable is said to Granger-cause the target variable. While this may not be what some call "true" causality but rather "predictive" causality, for our intents and purposes it is the best-available measure.

Specifically, F-tests are used to determine the presence of additional forecasting value. The null hypothesis is that the explanatory variable does not Granger-cause the target variable.

Hence, causality is inferred if the test identifies sufficient statistical evidence of Granger-causality that the probability of it being a coincidence is below a certain threshold, such as 5% (Exhibit 99).

G10 | Currency Summary

USD **Our view: Neutral** **Risk skew: Neutral**

Watch: PMI Revision, ISM Services, Jobless Claims, CPI Benchmark Revisions

2.3%

DXY **Support:** 102.75/103.00, 102.00, 100.75, 99.50/75, 97.75, **Resistance:** 104.25/50, 105.00, 106.75/107.00, 108.00

We remain neutral on the USD overall as it is caught between conflicting forces. On the one hand, as Chair Powell emphasized this week, rate cuts are highly likely to be coming later this year even if March is too early, which tends to weigh on rates and bolster risk appetite, in turn weighing on the USD. On the other hand, investors continue to focus on growth-divergence between the US and the RoW, and investors are increasingly contemplating US 2024 election risks as well. The cross-currents make it more difficult to trend meaningfully. Next week's CPI benchmark revisions will be a critical focus for markets trying to estimate the pace of Fed rate cuts this year and thus the USD outlook.

EUR **Our view: Neutral** **Risk skew: Bearish**

Watch: PMI Revision, Inflation Expectations, Retail Sales, Germany Factory Orders, CPI Revisions

-2.5%

EUR/USD **Support:** 1.0750, 1.0650, 1.0525, 1.0450, **Resistance:** 1.0900, 1.1000, 1.1150, 1.1250, 1.1475

We remain bearish on EUR on crosses, particularly versus the JPY. This week's core CPI was a bit firmer than expected, which may limit market pricing for an April cut from the ECB. But soft growth and rising risks of imported deflation from China may raise risks that markets price in a cutting cycle for 'bad reasons' which implies a faster pace of cuts and a deeper terminal rate. We think EUR will emerge as a key funding currency for investors this year, both versus the JPY (given its rate sensitivity) but also perhaps versus risk sensitive currencies too.

JPY **Our view: Bullish** **Risk skew: Bullish**

Watch: Scheduled cash earnings, Household spending, Balance of payment, weekly MoF data

0.9%

USD/JPY **Support:** 146.00, 143.75, 140.75, 138.75/139.00, 137.25, **Resistance:** 148.50, 149.75, 150.50, 152.00

We remain bullish on JPY, and maintain our short EUR/JPY trade. While Powell didn't see a March cut as their base case, the US rates market has priced in a sharper Fed rate cutting cycle beyond March with the resurgence of US regional banking concerns. We believe that deeper Fed cut pricing may weigh on USD/JPY via the policy convergence narrative. The combination of weak risk sentiment and lower global yields should become the tailwind for JPY.

GBP **Our view: Neutral** **Risk skew: Neutral**

Watch: LFS Revisions, PMI, News on Potential March 6 Budget

-3.1%

GBP/USD **Support:** 1.2600, 1.2450, 1.2375, 1.2200, 1.2075/1.2100, **Resistance:** 1.2775, 1.2800, 1.3000, 1.3125/50/75

We think risks are tactically balanced for GBP in the next few weeks. We don't think the BoE forecasts and commentary this week are inconsistent with a May cut, though the risks have skewed a bit to the later side, in our view. More importantly, though, we think investor focus will now pivot away from the BoE and toward fiscal policy with the upcoming March 6th budget announcement. Incoming newsflow suggesting a larger-than-expected package could raise growth expectations and local rates, supporting the currency. Longer-term we still think GBP will underperform NOK and continue to recommend shorts there.

CHF **Our view: Neutral** **Risk skew: Bearish**

Watch: Unemployment, FX Reserves

1.9%

EUR/CHF **Support:** 0.9275/0.9300, 0.9150, 0.9050/75, **Resistance:** 0.9475, 0.9550, 0.9700/25, 0.9850/75, 0.9975

We remain neutral CHF in the absence of significant new developments to the Swiss economy. However, we see risks to the currency as balanced to the downside. With the SNB having begun to pivot towards easing already back in December, the likelihood of CHF weakness due to the easing of monetary policy (either from policy rate or FX), is increasing. Next week the SNB will report the size of its FX reserves as of the end of January. Given the uptick in December, leading to market speculation about the SNB selling CHF, this release will likely be closely scrutinized by the market for any evidence of follow through.

CAD

Our view: Neutral **Risk skew: Neutral**

Watch: Employment

2.0%

USD/CAD **Support:** 1.3350, 1.3200, 1.3100, 1.2975/1.3000, **Resistance:** 1.3550, 1.3625, 1.3750, 1.3975, 1.4175

We are neutral on USD/CAD. The growth divergence story between the US and Canada still holds, but we are a bit more cautious about the extent to which markets can price in additional cuts for the BoC in the near term after the recent upside surprises in Canadian GDP and PMI data. Our oil strategists flag upside risks to oil prices in the near term from the Saudi government no longer requiring Aramco to raise capacity from 12 to 13 mb/d. While the sensitivity to oil has not been particularly strong, a rebound in oil prices would still be CAD supportive. Global risk demand remains the key driver for CAD, which is why we think the US CPI revisions on February 9 will be an important catalyst.

AUD

Our view: Bullish **Risk skew: Bullish**

Watch: Retail Sales, RBA Rates Decision

-3.5%

AUD/USD **Support:** 0.6525/50, 0.6425, 0.6275/0.6300, 0.6375, **Resistance:** 0.6625, 0.6725, 0.6850, 0.6900, 0.7000, 0.7150

We continue to see room for AUD outperformance. AUD/USD has lagged moves in highly-correlated variables like 5y US-Australian rate differentials and commodity prices. A rise in copper prices (as our commodity strategy colleagues expect) would likely boost AUD given copper's close relationship to the currency. Our economists do not expect the RBA to signal a pivot toward easing at its meeting next week, likely disappointing investors anticipating a dovish turn from the bank after slower-than-expected 4Q CPI data. We therefore see the prospect for AUD/NZD during the coming week.

NZD

Our view: Neutral **Risk skew: Neutral**

Watch: Employment

-1.3%

AUD/NZD **Support:** 1.0675/1.0700, 1.0625, 1.0575, 1.0475/1.0500, **Resistance:** 1.0825, 1.0925, 1.1050/75, 1.1175, 1.1400

AUD/NZD sits just above a well-established trendline higher stretching from the 2021 lows. We expect the 4Q employment report on February 6 will be a NZD catalyst, particularly if it shows two consecutive months of labor market contraction (which would echo prints in early 2022). We continue to see scope for AUD/NZD gains as the pair rejoins rate differentials, which would be consistent with a level around 1.12. Relative PPP also dictates a higher AUD/NZD, given recent high inflation in New Zealand.

SEK

Our view: Neutral **Risk skew: Bearish**

Watch: PMI, IP

2.4%

EUR/SEK **Support:** 11.19/20, 11.00/05, 10.86, 10.72, 10.55, 10.35, **Resistance:** 11.50/53, 11.84, 11.94/95, 12.05, 12.13, 12.19

Risks are skewed to the downside for SEK on crosses, and in fact we think these negative risks are rising. The Riksbank this week was surprisingly dovish and it appears open to the idea of cutting rates in March, which would make it the first G10 central bank to start cutting. Meanwhile, the Riksbank's FX-hedging, SEK-buying program in USD/SEK is likely to end next week, removing a key currency support from the market. Continued weakness in global and European manufacturing augurs poorly for Swedish growth, amplifying the rate declines and SEK weakness.

NOK

Our view: Neutral **Risk skew: Bullish**

Watch: Industrial Production, CPI, PPI

0.7%

NOK/SEK **Support:** 0.9850, 0.9800, 0.9700, 0.9500, **Resistance:** 1.0025/50, 1.0100, 1.0175, 1.0300, 1.0450

We remain bullish NOK on a relative value basis and neutral outright to hedge for global macro risks. Eyes next week will be set on January CPI. Despite market consensus expecting a small step down (C: 5.2%Y; P: 5.5%Y) in core (CPI-ATE), the level remains elevated. Particularly in comparison to certain G10 counterparts such as Sweden. As a result, we expect next week's CPI release to keep the relative "out-hawkishness" narrative of the Norges Bank alive, recommending long NOK/SEK and short GBP/NOK to capitalize on this divergence.

Charts show 3M performance against USD, as normally quoted and DXY for USD. Click on any currency for a reference webpage on Matrix.

Inflation-Linked Bonds

United States

Giving back gains: We were barely through January, a historically favorable month for breakevens, before the product gave back all gains made earlier in the month. The weakness extends to beta-adjusted breakevens, which are on the lower end of their 1y range.

Neutral for now: Even with breakevens at local lows, we do not see much of an opportunity to be long breakevens. We stay neutral, and prefer to express our duration longs via nominals instead of TIPS.

Japan

Next Monday's JGBi auction is set to be a roughly JPY250 billion reopening of JBI28. Breakeven inflation rates (BEIs) are currently near the top of their recent ranges and as such do not appear cheap relative to survey-based measures of inflation expectations. Moreover, inflation carry will likely be modestly negative over the next three months. Given our own expectation that USD/JPY is more likely to fall than rise going forward and the lack of obvious near-term catalysts for BEI outperformance, we suggest that it might be better to delay the timing for dip-buying.

United States | Weakness resumes with January over

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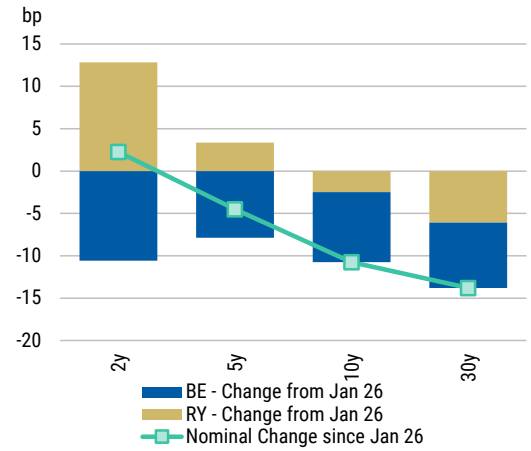
Can't keep the bid

We were barely through to the end of January – a month where breakevens tend to do well seasonally – and breakevens could not maintain the gains they made earlier in January. Breakevens led the move lower in nominal yields over the week (see Exhibit G105), and had hardly clawed back up when a strong-looking payroll report pushed yields higher. The weakness in breakevens was across the curve.

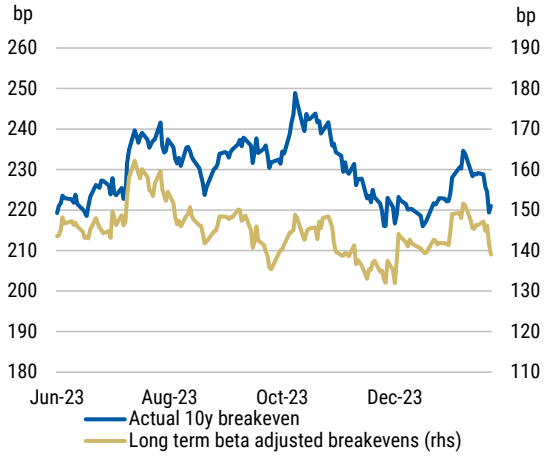
On a beta-adjusted basis as well, breakevens were pretty weak, and are currently on the weak end of their range in the last year. A Fed meeting where the Fed sounded confident about not cutting in March, and one where inflation data including ECI and unit labor costs surprised to the downside, breakevens were bound to fare poorly. A sharp decline in oil prices only made things worse for breakevens.

Exhibit G105: Moves in Treasury nominal yields and breakevens over the week



Source: Bloomberg, Morgan Stanley Research

Exhibit 106: Beta-adjusted breakevens over the last six months

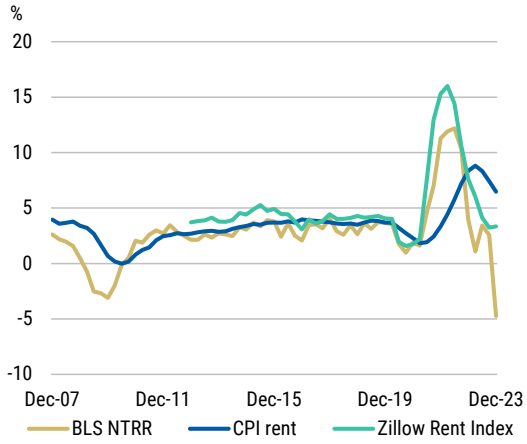


Source: Bloomberg, Morgan Stanley Research

As we have noted earlier, even with breakevens languishing at local lows, we do not see much of an opportunity to be long breakevens. The Fed's policy is closely linked to getting more confidence on cooling inflation, and we think it is likely to get that confidence from the inflation in the pipeline. Especially given that shelter inflation, which tends to be sticky, is due for a move lower based on leading indicators like the New Tenant Rent index (see Exhibit 107).

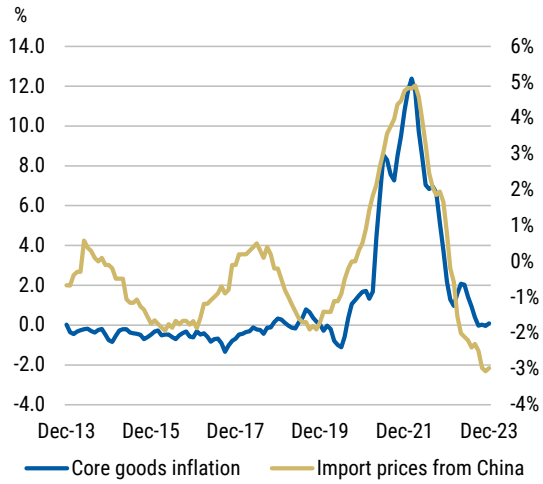
And our China economists see continued risk of overcapacity driving disinflation coming out from China and being exported to other countries, including US goods prices (see Exhibit 108). Overall, not an environment suited to playing for upside risks. **We stay neutral on breakevens, and prefer expressing our duration longs via nominals instead of TIPS.**

Exhibit 107: New Tenant Rent index, Zillow index, and CPI rent inflation



Source: Bloomberg, Morgan Stanley Research

Exhibit 108: Import prices from China vs. CPI core core goods inflation



Source: Bloomberg, Morgan Stanley Research

Japan | Previewing the February 5 JGB linker auction

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Summary

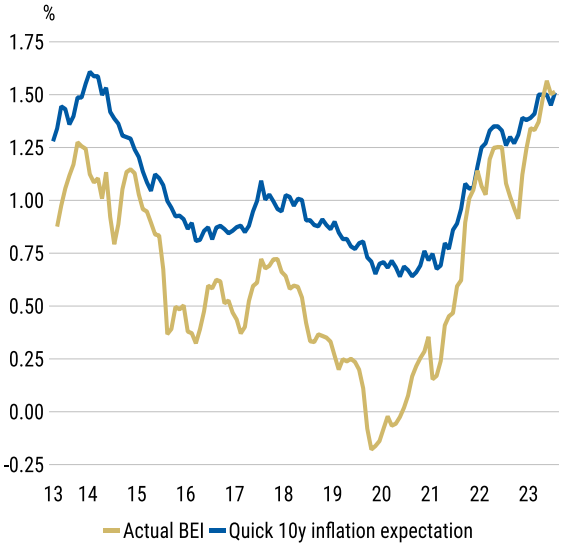
Next Monday's JGBi auction is set to be a roughly JPY 250 billion reopening of JBI28 (see Exhibit 109). Breakeven inflation rates (BEIs) are currently near the top of their historical ranges and as such do not appear cheap relative to survey-based measures of inflation expectations (see Exhibit 110). Moreover, inflation carry will likely be modestly negative over the next three months. Given our own expectation that USD/JPY is more likely to fall than rise going forward and the lack of obvious near-term catalysts for BEI outperformance, we suggest that it might be better to delay the timing for dip-buying.

Exhibit 109: JGBi auction details

Issue	JGBi28
Delivery date	06-Feb-24
Maturity date	10-Mar-33
Nominal Reference bond	JB370
Base CPI	104.1
Reference CPI at auction	106.4
Index ratio	1.02209
Issue Amount (bn)	250
Auction type	Dutch

Source: Japan MoF, Morgan Stanley Research

Exhibit 110: Actual breakeven inflation versus survey-based long-term inflation expectations



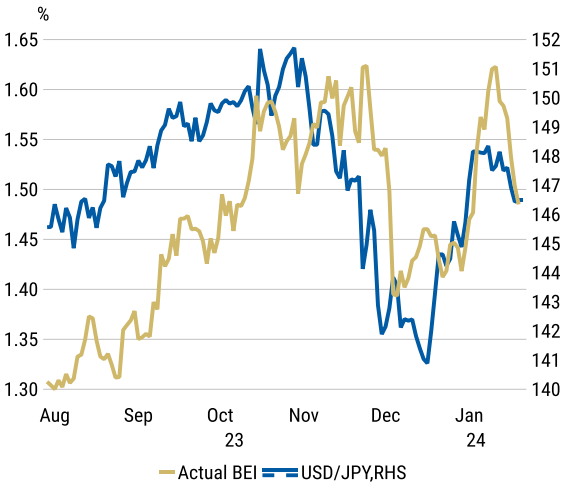
Source: Bloomberg, Quick, Morgan Stanley Research

What's happened since the previous auction?

BEIs appear to have been taking their direction mostly from USD/JPY since the previous auction on November 7 (see Exhibit 111). Late last year saw BEIs fall in line with a weakening of USD against JPY as the Fed started to welcome a slowdown in inflation and US rates declined as a result, while early 2024 has seen them rebound towards their November highs as UST yields have backed up and USD/JPY has approached 148 once again.

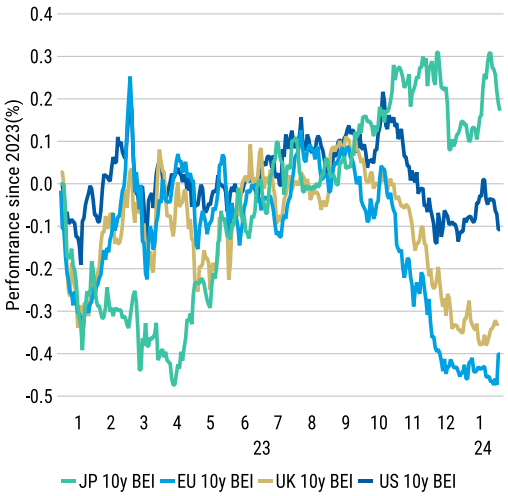
Meanwhile, Japan BEIs has been a global outperformer since the second half of last year (see Exhibit 112). Possible reasons include the risk that import prices might develop renewed upward momentum if USD/JPY remains elevated as well as the fact that Japanese CPI inflation has remained comparatively robust even amid overseas slowdowns – as firms look to make up for lost time on the cost pass-through front (see Exhibit 113).

Exhibit 111: 10y breakeven versus USD/JPY



Source: Bloomberg, Morgan Stanley Research

Exhibit 112: Global 10y breakeven performance

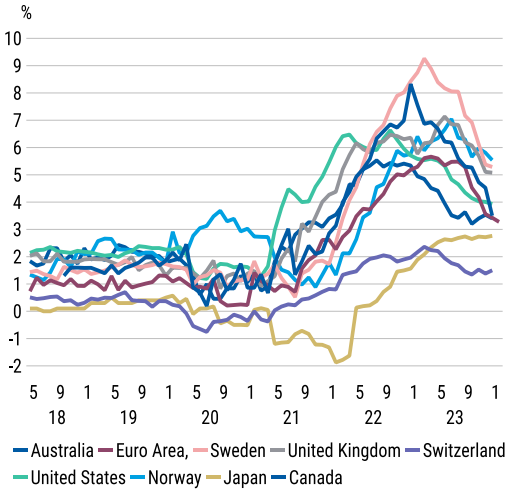


Source: Bloomberg, Morgan Stanley Research; Note: We use inflation swap for G3 countries. We calculate BEI as TONA OIS yield - real yield for Japan.

Looking ahead

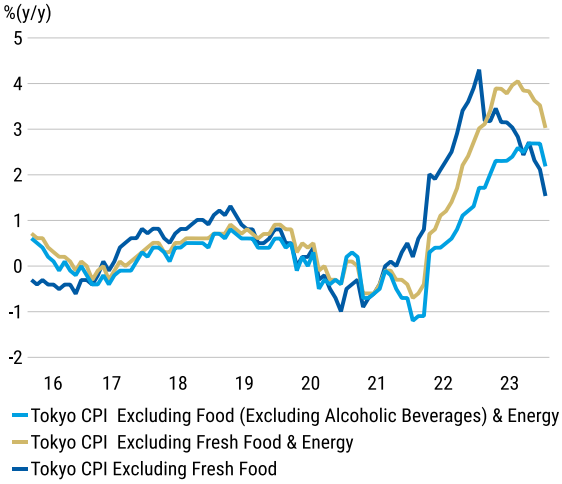
However, we expect JGBi BEIs to face a number of headwinds going forward. For starters, inflation has begun to show signs of peaking out now that the lagged impact of higher import costs is gradually fading. As we discussed in Japan | Back To Duration, And Back To Carry, January 27, 2024, core CPI inflation (all items less fresh food) dropped below +2% (YoY) for Tokyo in January, reflecting significant slowdowns for hotel charges and goods prices as a whole (see Exhibit 114).

Exhibit 113: Global CPI (ex food and energy) development



Source: National sources, Bloomberg, Morgan Stanley Research

Exhibit 114: Tokyo CPI YoY



Source: Macrobond, Morgan Stanley Research

Core CPI inflation is expected to quicken this month due to base-year effects associated with the government's subsidization of household electricity and piped gas bills (which commenced from February 2023), but our economists expect core CPI inflation to slow once again through year-end due to an acceleration in services inflation being outweighed by goods disinflation (see Exhibit 115).

The BoJ has also presented analysis showing that rising wages are generating upward pressure on services prices, but as yet lacks confidence vis-à-vis sustainability and has thus – at least to this point – stopped short of declaring that Japan is well and truly on track to achieve the +2% "price stability target" on a sufficiently sustainable and stable basis.

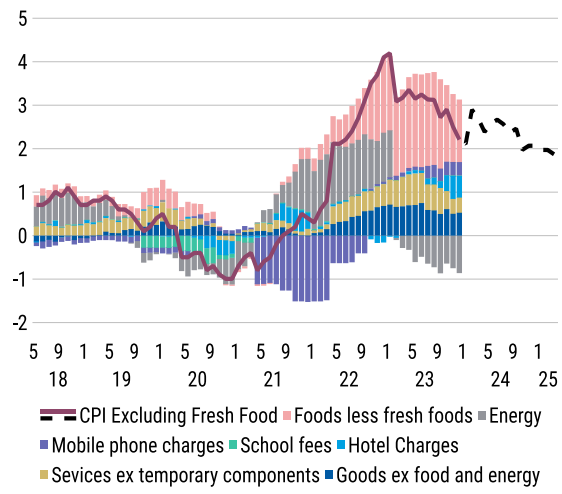
Second, JPY-denominated energy prices – which tend to be relatively quick to reflect fluctuations in raw material prices – appear set to start declining (see Exhibit 116). Tactical BEI longs would have looked like a good idea when JPY was weakening and energy prices were climbing, but our US rates team has now started to talk of markets pricing in a steeper Fed rate cut trajectory if economic data turn out to be adversely impacted by bad weather and slower fiscal spending.

On the other hand, the BoJ is widely expected to start moving down the "normalization" road in either March or April. Any such "convergence" of monetary policy stances could of course prove negative for USD/JPY.

Meanwhile, our commodities strategists expect oil prices to basically drift sideways in 2024 despite ongoing geopolitical tensions, suggesting that JGBi BEIs might no longer face all that much in the way of upward pressure via the import cost channel.

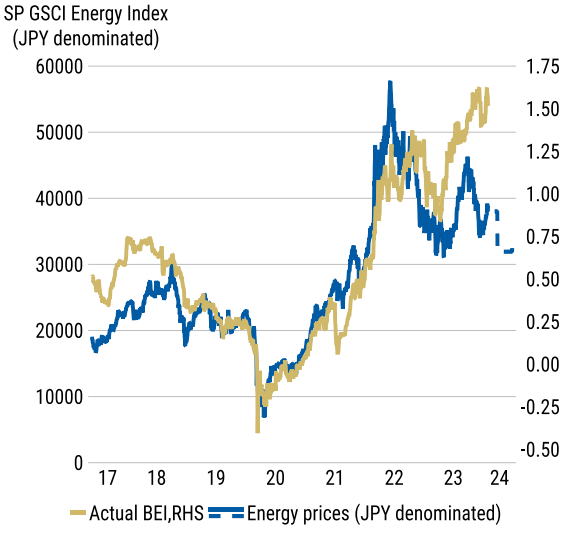
Finally, as we discuss below, our economists' envisaged trajectory for core CPI inflation points to inflation carry being negative over the next three months or so. The longer-term inflation outlook is of course riddled with uncertainty, and as such we basically see little reason to buy at this particular point in time at such high valuations.

Exhibit 115: CPI ex fresh food YoY forecast



Source: Macrobond, Morgan Stanley Research

Exhibit 116: 10y breakevens and JPY-denominated energy prices



Source: Bloomberg, Morgan Stanley Research forecasts; Note: We use OIS rather than JGBs to define BEI.

Inflation carry

Our economists' envisaged trajectory for core CPI inflation points to carry being negative over the next three months or so (see Exhibit 117), and forecasts of a subsequent return to positive territory will clearly need to be discounted given that so much could end up happening (or not happening) between now and then.

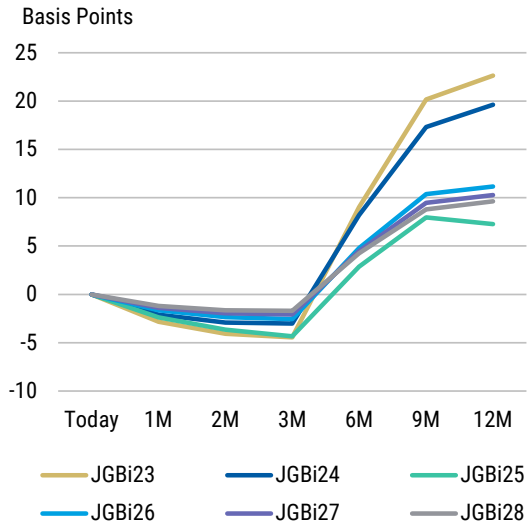
Valuations

Valuations for nominal JGBs continue to be distorted to at least some degree by the BoJ's bond-buying operations, for which reason we are instead using matched-maturity OIS rates when assessing the richness or cheapness of BEIs.

This framework tells us that while the comparatively scarce JBI25 and JBI26 are trading at premiums, BEIs for JBI23 (which has a little more than four years remaining to maturity) onwards are basically all in the vicinity of 1.5% (see Exhibit 118), which is on a rough par with various survey-based measures of inflation expectations and thus looks neither especially rich nor cheap.

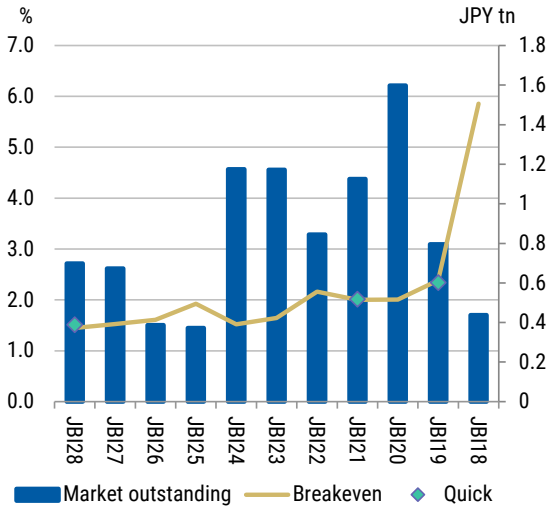
Some might see decent value if they believe that inflation will stabilize at around +2% amid a "virtuous cycle between wages and prices", but we see no obvious reason why such a narrative might gain greater traction at this timing when inflation continues to decelerate.

Exhibit 117: Expected inflation carry based on our economists' forecasts



Source: Bloomberg, Morgan Stanley Research forecasts

Exhibit 118: Breakeven valuation across each issues (as of February 2)



Source: Bloomberg, BoJ, Japan MoF, Morgan Stanley Research

Short-Duration Strategy

United States

Funding conditions stable thanks to moderate UST supply: After spiking in November and December, funding has largely remained stable in 2024. In our view, this is driven by a moderation in UST settlements in December and January. This has also led the demand for repo financing to moderate since year-end, with SOFR volumes remaining below the recent peak and dealer repo intermediation costs, as measured by the GCF – TGCR spread, seeing a significant improvement.

Enter short 2y swap spreads given pickup in UST supply: We enter short 2y (Jan '26) SOFR swap spreads at -12.3bp with a stop at -9bp to capture tighter funding conditions ahead. We see the current entry level as attractive given that market-implied expectations for funding seem fair as measured by SOFR/FF, which has significantly widened recently. In addition, a steady pickup in UST net settlements – and therefore an increase in the demand for repo financing – will likely contribute to tighter funding conditions and higher SOFR prints.

More UST in February and March, led by bills: As discussed in this week's refunding, recent bills auction increases will allow the Treasury to increase privately-held bills supply by $300-$350bn over the next two months. In addition, the Treasury intends to keep bills auctions unchanged until late March or early April. This will lead daily net bills settlements to go back to levels not seen since October.

RRP and TGA keep the door open to tighter funding conditions: As of today (2/2), the RRP came in at $513bn. This represents a $302bn drop since 12/4, despite only $130bn of net bills supply to the market in December and January and a recent moderation in repo rates. A continued faster-than-expected RRP decline could combine with the expected ~$350bn TGA surge in April to lead reserves temporarily lower, contributing to higher repo rates.

Bank liquidity needs to remain in focus: Lastly, an increase in bank liquidity over the coming months due to ongoing deposit competition has the potential to further contribute to tighter funding conditions. This will be reflected in banks maintaining or further increasing their need for wholesale funding via FHLB advances, time and brokered deposits, and/or Fed loans.

United States | Break is over, enter short 2y swap spreads

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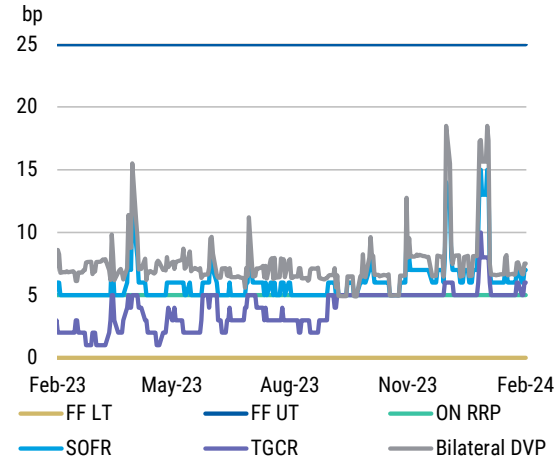
Funding conditions have remained stable thanks to moderate UST supply

After spiking for 2-month ends, SOFR has remained largely stable in 2024. This past month-end saw SOFR practically unchanged, coming in at 532bp (RRP +2bp). This compares with RRP +10bp around year-end and RRP +9bp around November month-end. This has led repo rates to remain largely anchored to the RRP rate over the past weeks (Exhibit 119).

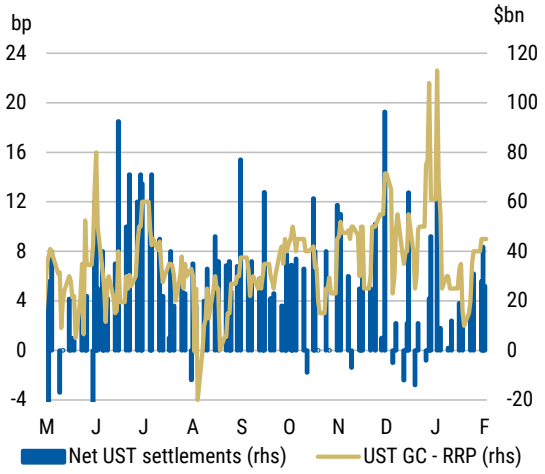
In our view, this is driven by a moderation in UST settlements in December and January led by bills. As shown in Exhibit 120, the timing of total UST net settlements has helped informed swings in repo rates (UST general collateral or GC repo) relative to the RRP rate. As expected, large net settlements align with a wider UST GC - RRP spread and vice versa.

Exhibit 119: TGCR, SOFR, and cleared bilateral repo within the target range



Source: Federal Reserve, Morgan Stanley Research

Exhibit 120: UST GC repo vs. RRP rate and net UST net settlements

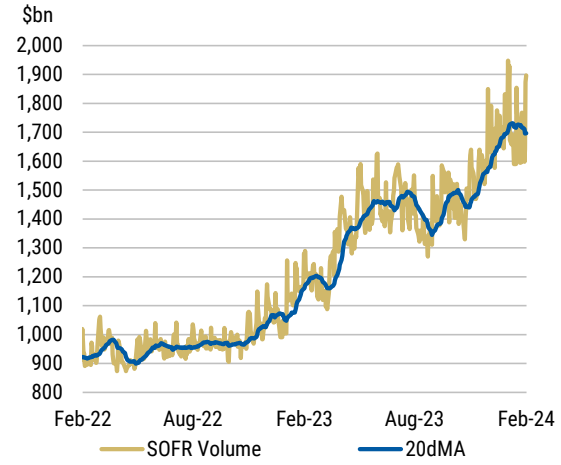


Source: US Treasury, Federal Reserve, Morgan Stanley Research

As a result of lower UST supply, the demand for repo financing has moderated since year-end. This has been reflected in SOFR volume, which peaked at $1.948tr post year-end and came in at $1.7tr on average for January (see Exhibit 121). This combination of lower UST supply and stable demand for repo financing also helped alleviate dealer balance sheet and intermediation costs.

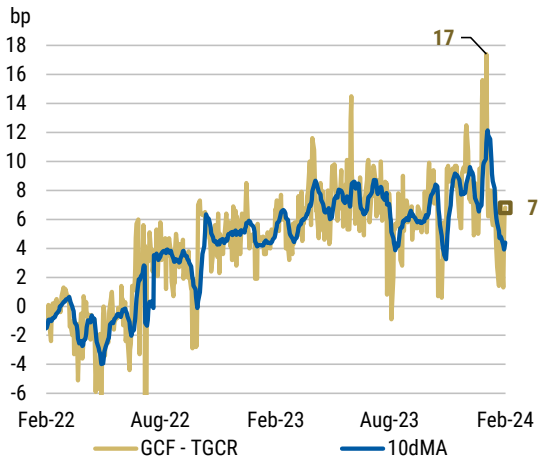
As shown in Exhibit 122, the GCF - TGCR spread (proxy for the repo bid-ask spread) declined significantly in January after peaking at 17bp in year-end. At the same time, as front-end markets continue to come into balance, the cost of dealer intermediation in repo has continued to gradually increase since 2022. We expect for this gradual increase to continue as the RRP is depleted further and for more volatility in repo rates to emerge once the RRP is depleted into 2H24.

Exhibit 121: SOFR volume



Source: Federal Reserve, Morgan Stanley Research

Exhibit 122: GCF - TGCR spread

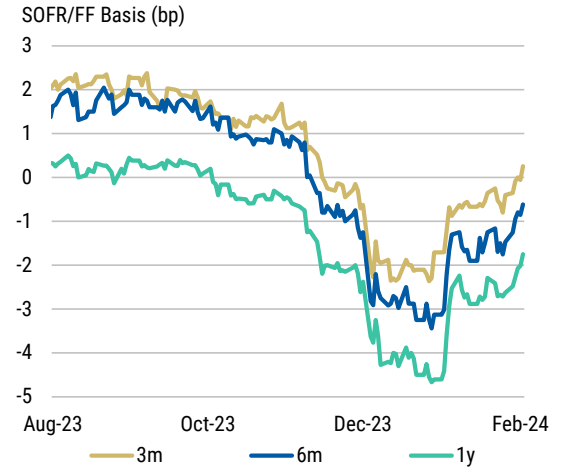


Source: Bloomberg, Federal Reserve, Morgan Stanley Research

Well-behaved repo markets – given more moderate UST supply and Fed guidance that it is moving towards an eventual taper of QT in the coming months – have helped market expectations for funding to improve. As shown in Exhibit 123 , the SOFR/FF basis has widened significantly since year-end. The 3-month basis is now in positive territory, which shows that the market expects SOFR to be below fed funds over the next 3 months.

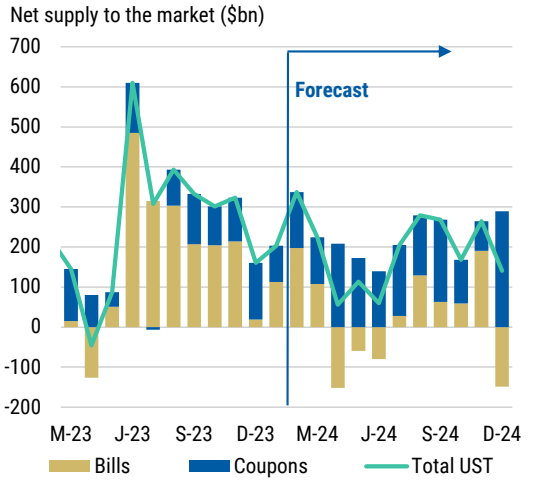
In addition, the 1y SOFR/FF basis is now above -2bp. This is consistent with the realized SOFR-EFFR spread seen in 2018 and shows a significant reversal from the overly pessimistic expectations for funding that the market had priced in December (see here for more).

Exhibit 123: 3m, 6m, and 1y SOFR/FF basis



Source: Bloomberg, Morgan Stanley Research

Exhibit 124: Monthly net UST supply forecast



Source: US Treasury, Federal Reserve, Morgan Stanley Research estimates

As we discussed last week, we see UST supply ramping up for the rest of this quarter driven by recent bills auction increases and three rounds of coupon auction increases over the last three refunding announcements (Exhibit 124). As a result, we see the recent calm in funding to be temporary and **enter short 2y (Jan '26) SOFR swap spreads at -12.3bp with a stop at -9bp** to capture tighter funding conditions.

We see the current entry level as attractive given that market-implied expectations for funding seem fair as measured by SOFR/FF. In addition, a steady pickup in UST net settlements, and as a consequence an increase in the demand for repo financing, will contribute to tighter funding conditions and higher SOFR prints.

We expect the main catalysts for this trade to be 1) larger UST supply, 2) a sustained decline in the RRP and an eventual increase in the TGA due to April tax receipts, and 3) greater bank liquidity needs given ongoing deposit competition and higher funding costs.

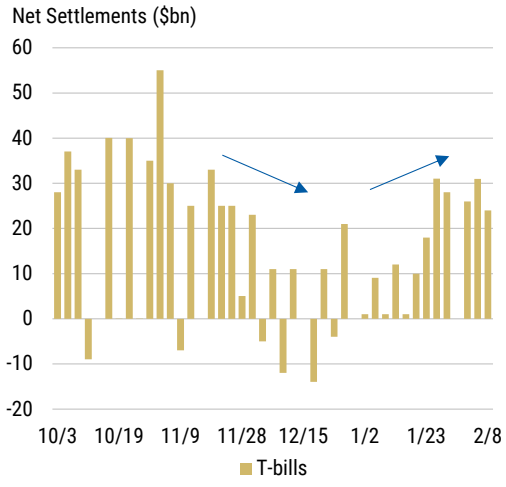
The main risk will be if the Fed expedites the start of the QT taper vs. our base case for a June start and/or if the data allows the Fed to remain on hold for longer, pushing further out the market-implied timing of cuts keeping investors paying front-end SOFR.

UST supply to pick up in the coming months

As discussed in this week's refunding, recent bills auction increases will allow Treasury to increase privately-held bills supply by $300-$350bn over the next two months. In addition, Treasury intends to keep bills auctions unchanged until late March or early April. This will lead daily net bills settlements to go back to levels not seen since October.

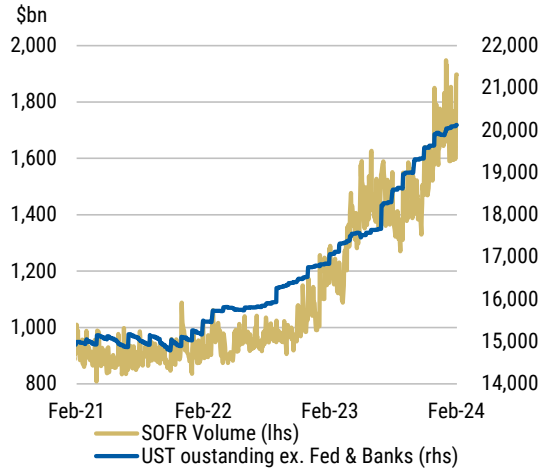
As shown in Exhibit 125 , net settlements based on the already-announced bills auction for this past week and next will average $50bn+ per week. We expect a similar pace to continue for the next 2 months which will combine with larger coupon net settlements to bring more UST to the market. As a result, the demand for repo financing should increase as more UST outstanding is in the hands of investors that typically require financing to digest more supply (Exhibit 126).

Exhibit 125: Net bills settlements



Source: US Treasury, Morgan Stanley Research

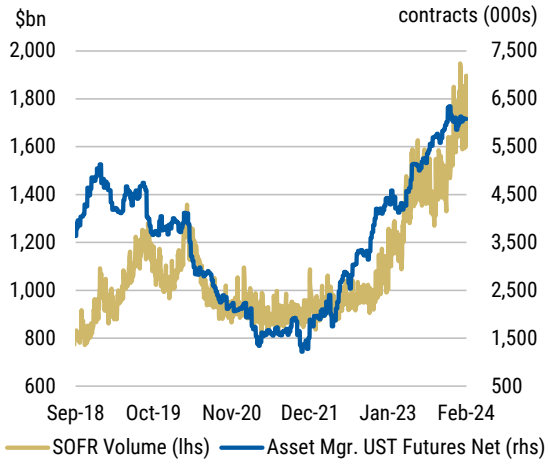
Exhibit 126: UST outstanding ex. Fed and banks and SOFR volume



Source: Federal Reserve, Morgan Stanley Research

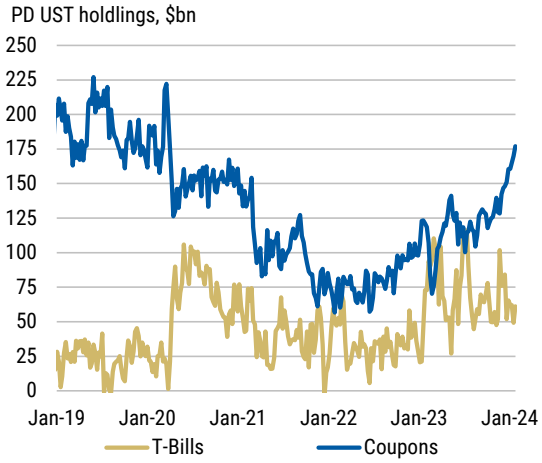
In addition, further growth in UST outstanding has largely coincided with the demand from asset managers for UST futures (see here for more). This should result in greater demand for repo financing as leveraged investors continue to take advantage of an attractive cash/futures basis. As a result, SOFR volume (proxy for the demand for repo financing) has also tracked asset manager net UST futures holdings (Exhibit 127).

Exhibit 127: Asset managers net UST futures position



Source: Bloomberg, Morgan Stanley Research

Exhibit 128: Primary dealer net UST holdings over the past years



Source: Federal Reserve, Morgan Stanley Research

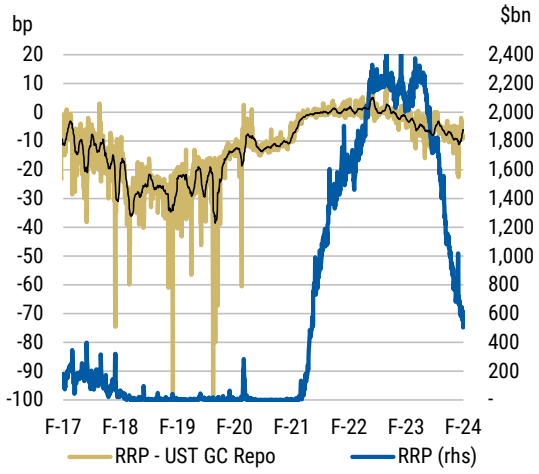
More UST supply, in particular coupons, will also contribute to primary dealers holding more UST over time. As shown in Exhibit 128 , primary dealer net UST coupon holdings have seen a significant increase over the past month. As financing needs from dealers and balance sheets become more constrained, the funding conditions are likely to tighten further.

RRP and TGA keep the door open to tighter funding

As of today (2/2), the RRP came in at $513bn. This represents a $302bn drop since 12/4 despite only $130bn of net bills supply to the market in December and January and a recent moderation in repo rates. As we have discussed, we continue to see the conditions in place (repo rates above the RRP rate and the MMF need to extend) for the RRP to be depleted in the coming months (Exhibit 129).

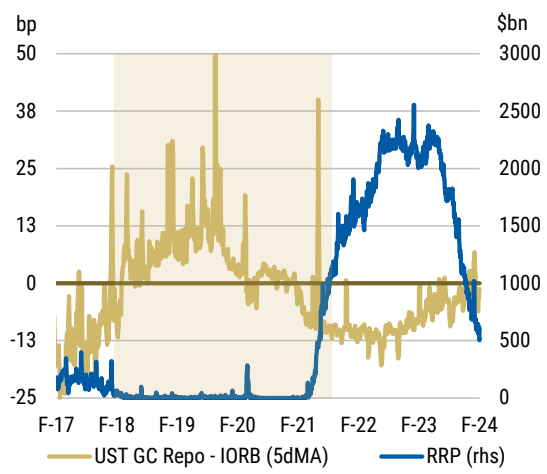
In addition, the pace of the decline continues to outpace our initial expectations, and we now see risks for the RRP to be fully depleted by May-July. As we discussed in Life After the RRP, the eventual depletion of the RRP will be an important benchmark for funding conditions as the marginal lender in repo switches from MMFs to banks (RRP rate to IORB). As shown in Exhibit 130 , the timing of the RRP decline will be the main driver in taking repo rates consistently above IORB (5.4%).

Exhibit 129: RRP - UST GC repo spread and RRP usage



Source: Bloomberg, Morgan Stanley Research

Exhibit 130: UST GC repo - IORB spread and RRP usage



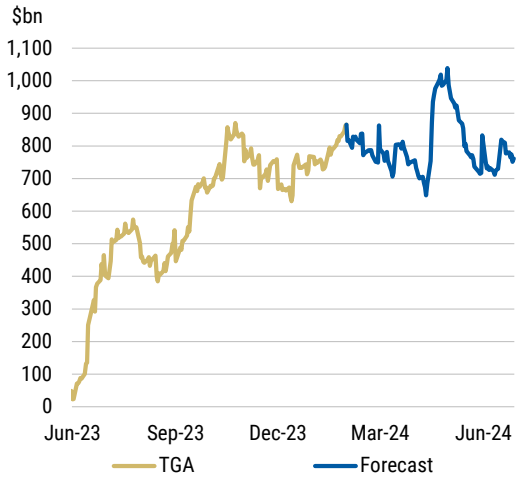
Source: Bloomberg, Morgan Stanley Research

Hence, the continued decline in the RRP will contribute to a further gradual tightening in funding conditions, particularly as bills supply ramps up to $50bn/week and month-end net coupon settlements increase above $100bn for the next two month-ends.

On top of this, the TGA will come into focus as April tax receipts could likely lead the TGA to increase by ~$350bn, according to our estimate (Exhibit 131). A faster-than-expected depletion in the RRP by then would also contribute to tighter funding given the higher likelihood for reserves to temporary decline to $3.2-3.3tr.

As shown in Exhibit 132, we continue to see risks for a steady decline in reserves concentrated in 2H24 and into 2025 as the RRP is fully depleted but note the temporary decline in April. Hence, a significant increase in the TGA in April paired with the potential for greater bank demand for liquidity could lead investors to expect tighter funding conditions as SOFR starts to gradually climb from the recent low levels of RRP +1-2bp.

Exhibit 131: TGA forecast until June 2024



Source: US Treasury, Morgan Stanley Research estimates

Exhibit 132: Fed balance sheet forecast

EoM	UST*	MBS	SOMA**	Reserves	RRP	TGA	Loans	Currency
Feb	4,521	2,402	6,923	3,574	375	863	172	2,333
Mar	4,461	2,387	6,848	3,681	300	750	172	2,338
Apr	4,401	2,369	6,771	3,379	200	1,039	142	2,344
May	4,341	2,351	6,693	3,556	125	833	122	2,350
Jun	4,311	2,333	6,645	3,639	50	761	112	2,356
Jul	4,281	2,315	6,597	3,636	-	750	102	2,362
Aug	4,251	2,297	6,549	3,622	-	700	92	2,367
Sep	4,221	2,282	6,503	3,486	-	775	82	2,373
Oct	4,191	2,266	6,458	3,374	-	825	72	2,379
Nov	4,161	2,251	6,412	3,413	-	725	62	2,385
Dec	4,131	2,235	6,367	3,327	-	750	52	2,391
Jan	4,101	2,220	6,321	3,265	-	750	42	2,397
Feb	4,117	2,204	6,321	3,249	-	750	32	2,403
Mar	4,132	2,189	6,321	3,233	-	750	22	2,409
Apr	4,148	2,173	6,321	3,209	-	750	3	2,415
May	4,163	2,158	6,321	3,203	-	750	3	2,420
Jun	4,179	2,142	6,321	3,197	-	750	3	2,426

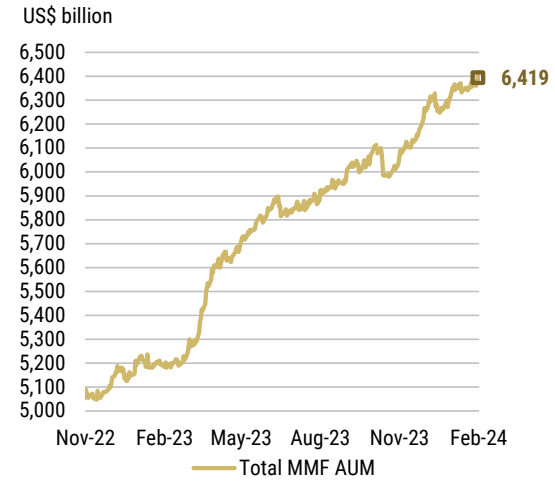
Source: Morgan Stanley Research forecast
*UST excludes inflation compensation
***SOMA reflects UST (ex. inflation compensation) and MBS

Bank liquidity needs to remain in focus

Lastly, an increase in bank liquidity over the coming months due to ongoing deposit competition has the potential to further contribute to tighter funding conditions. This will be reflected in banks maintaining or further increasing their need for wholesale funding via FHLB advances, time and brokered deposits, and/or Fed loans.

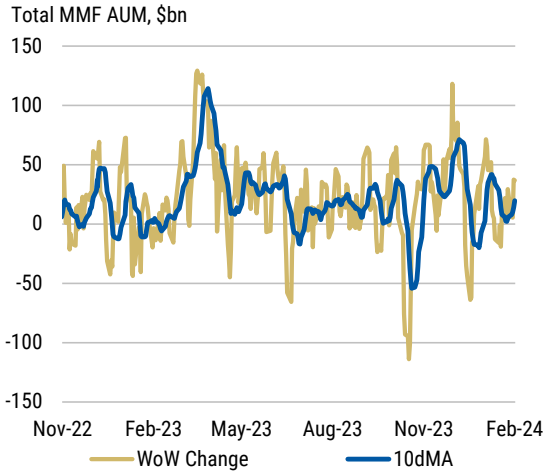
Over the past weeks, further inflows into MMFs, a significant decline in deposits to start the year, and recent weakness in regional bank stocks suggest that bank liquidity needs continue to be an issue worth paying attention to.

Exhibit 133: MMF AUM



Source: Crane Data, Morgan Stanley Research

Exhibit 134: MMF AUM week-over-week change



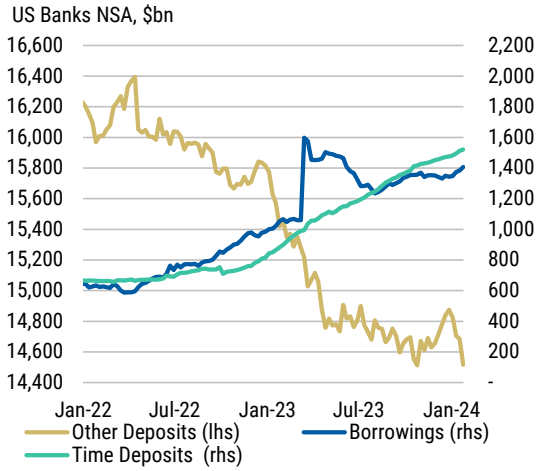
Source: Crane Data, Morgan Stanley Research

This past week, MMF AUM set a new record as of 2/1 of $6.419tr (Exhibit 133). This continues to suggest ongoing deposit competition as money market fund yields remain attractive. At the same time, the pace of growth in MMF AUM has remained steady and does not yet suggest the level of deposit outflows seen in March 2023 (Exhibit 134).

Using the H.8 release as of 1/24, we also note that US banks' liability mix has deteriorated so far into 2024. Other deposits, which exclude large time deposits and serve as a proxy for non-interest-bearing deposits, have declined by almost $300bn YTD (Exhibit 135).

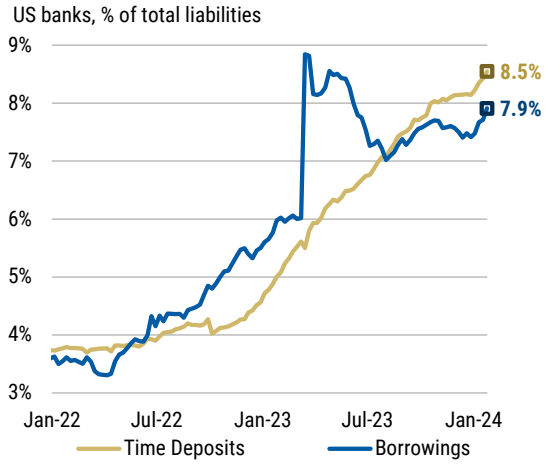
At the same time, time deposits and borrowings have resumed making a larger share of total liabilities, suggesting greater liquidity needs at banks and higher funding costs (Exhibit 136).

Exhibit 135: Select liabilities of US banks over the past 2 years



Source: Fed H.8 release, Morgan Stanley Research

Exhibit 136: Time deposits and borrowings relative to total liabilities



Source: Fed H.8 release, Morgan Stanley Research

Looking at the change in deposits since the start of QT, we note that the decrease so far in 2024 has more than reversed the $220bn increase in total deposits seen in 2H23. In addition, banks continue to rely on more borrowings, time deposits, and reducing securities holdings to fund deposit outflows.

This also continues to illustrate how different QT2 has been for banks relative to QT1, in which much more gradual Fed hikes led banks to keep deposits growth by over $900bn due to continued loan and securities growth and a relatively much more moderate use of time deposits. We summarize our analysis in Exhibit 137 .

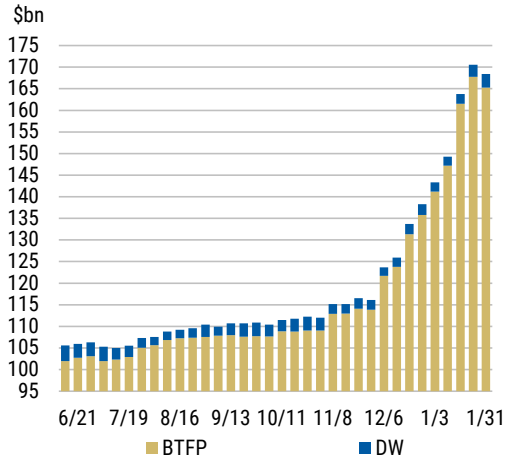
Given this backdrop, we remain closely attentive to bank funding needs. We also note that last week the Fed increased the BTFP rate to IORB (5.4%), increasing funding costs for individual banks that might continue to experience liquidity needs moving forward. This leaves future BTFP usage until March 11 and discount window (DW) loans as important indicators to monitor (Exhibit 138).

Exhibit 137: Change in deposits by item

in $bn	QT1 (Oct '17 to Sept '19)	QT2 (Jun '22 start)	2H22	1H23	2H23	1H24
Reserves	-802	250	-36	13	244	29
Loans	848	801	556	96	208	-60
Securities	410	-613	-234	-381	-25	26
Borrowings	-26	-763	-216	-362	-71	-114
Time Dep.	-193	-865	-241	-275	-290	-58
Other A/L	-476	337	315	-234	137	119
Other Deposits	**714**	**-1,527**	**-486**	**-675**	**-70**	**-295**
Total Deposits	**907**	**-662**	**-245**	**-400**	**220**	**-237**

Source: Fed H.8 release, Morgan Stanley Research

Exhibit 138: Fed BTFP and discount window loans

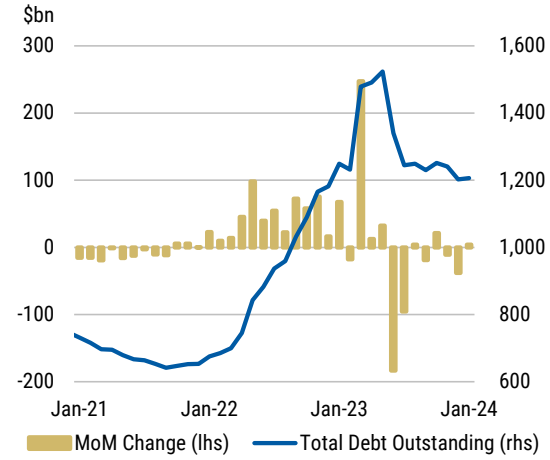


Source: Fed H.4.1. release, Morgan Stanley Research

Using monthly data from the FHLBs Office of Finance, we also note that FHLB debt remained largely stable in January and only increased by $4bn (Exhibit 139). This shows that bank demand for FHLB advances has largely remained stable and subdued relative to the significant surge seen in 1H23.

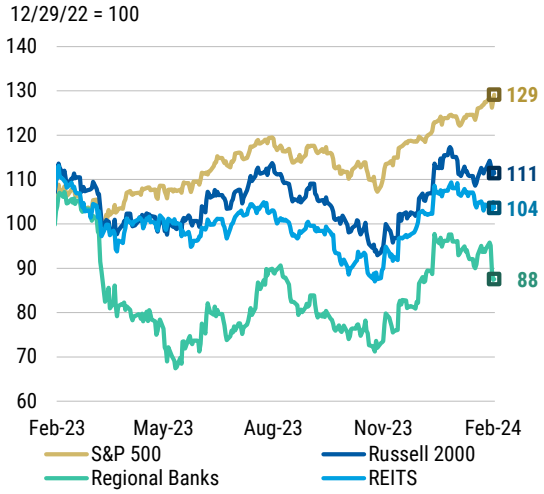
Putting all the pieces together, we do not yet see any sort of funding stress at banks but will remain attentive to further decline in deposits and growth in other non-deposit liabilities.

Exhibit 139: Total FHLB debt outstanding



Source: FHLBs OF, Morgan Stanley Research

Exhibit 140: Return of select equity indices



Source: Bloomberg, Morgan Stanley Research

In particular, the increased focus on higher loan allowances as evidenced in the recent decline of the KBW Regional Bank Index (Exhibit 140) and the potential for ongoing deposit competition due to further MMF inflows places a pickup in bank funding needs as another potential tailwind for tighter front-end swap spreads besides more UST supply.

- **Trade idea: Enter short 2y (Jan '26) SOFR swap spreads at -12.3bp with a stop of -9bp**

Interest Rate Derivatives

United States

A head-scratcher of a week: Implied volatilities on short expiry swaptions rose on the week, with policy-sensitive 1y-2y tails on 3m expiries up 8-9 norm vols. The move in gamma products reflects increased uncertainty around near-term monetary policy, as the market weighs strong data against Fed speak and banking stress.

Near-term uncertainty cheapening election vol: The 1y expiry term structure has been steepening since Nov23, as optionality windows include the 2024 US election. The expiry term structure flattened this week, amid increased monetary policy uncertainty, potentially providing an attractive entry point for expiry switch long-election vol trades.

Assessing curve vols: The forward swap term structure sees flat curves for some time. Indeed, current pricing sees a negative 2s30s spread for the two years, and a 10s30s which does not un-invert. Our screeners find 2y2s30s vol cheap, and 1y10s30s vol rich.

USH4 optionality worth a buy? We examine the significant delivery optionality in the US Treasury futures basis and explain how a long basis position can express a view on rate volatility. To illustrate, we construct an example basis trade and compare its performance to a receiver swaption trade under different rate scenarios.

United States | Pricing increased uncertainty

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Implied volatilities on short expiry swaptions rose on the week, led by the upper left. In particular, policy-sensitive 1y-2y tails on 3m expiries rose by 8-9 norm vols. Vega products cheapened across tails, with 5y expiries below their 10% percentiles on 1m and 12m lookbacks.

Exhibit 141: Swaption implied volatilities...

Expiry \ Tail	1y	2y	5y	10y	30y
1m	111.7	127.5	121.4	109.9	97.3
3m	120.8	131.1	119.3	107.2	93.8
6m	128.0	128.9	116.8	105.9	92.5
1y	131.4	126.4	114.6	105.8	93.0
2y	119.2	116.5	109.5	102.1	90.1
3y	111.4	110.1	104.6	97.9	86.8
5y	104.0	101.7	96.2	90.8	80.1
10y	87.9	86.2	80.7	76.3	67.4

Source: S&P Global, Morgan Stanley Research

Exhibit 142: ...and their w/w changes

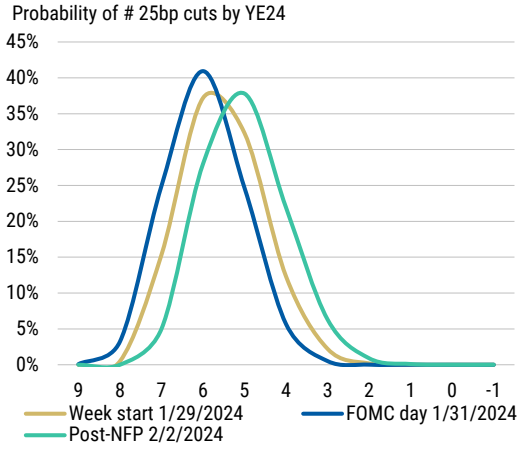
Expiry \ Tail	1y	2y	5y	10y	30y
1m	4.2	4.7	6.2	6.0	4.8
3m	8.4	9.0	4.2	1.9	1.6
6m	4.6	5.3	1.3	(0.9)	(1.2)
1y	1.1	(0.3)	(1.6)	(2.4)	(1.8)
2y	(2.1)	(0.9)	(2.0)	(2.2)	(1.5)
3y	(2.5)	(1.6)	(1.9)	(1.8)	(0.9)
5y	(2.0)	(2.2)	(2.2)	(2.1)	(1.7)
10y	(1.5)	(1.7)	(1.8)	(1.8)	(1.7)

Source: S&P Global, Morgan Stanley Research

The move in gamma products reflects increased uncertainty around near-term Fed policy (see Exhibit 143). Coming into the week, the market was pricing a modal outcome of six 25bp cuts (yellow line). Following Wednesday's refunding meeting, FOMC statement, and banking stress the distribution tightened closer to seven 25bp cuts priced. Finally, Friday's solid jobs data pushed the entire distribution to the right (cyan line).

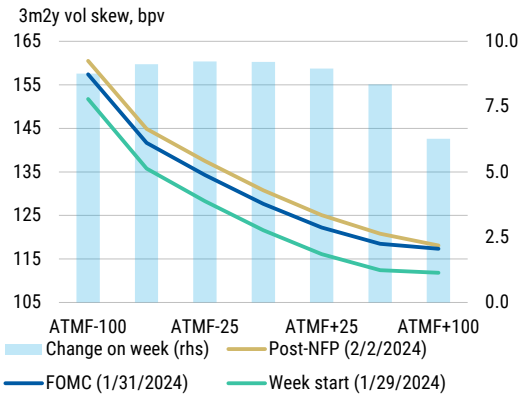
Swaption skew suggests a continued desire to receive rates, a signal of downside insurance demand after this week's banking stress. As we show in Exhibit 144 , Powell's comments in the backdrop of banking stress led the volatility surface to shift upwards. Friday's NFP data complicated Wednesday's bullish narrative, increasing uncertainty, and thus further richening vol. The uncertainty around banking stress led skew to steepen.

Exhibit 143: Fed pricing was volatile this week



Source: CME Watchtool, Morgan Stanley Research

Exhibit 144: 2m3y skew shifted upwards, and steepened



Source: S&P Global, Morgan Stanley Research

Is the move in implieds justified? Implied to realized ratios suggest 1m and 3m expiries are rich to underlyings (see Exhibit 145 and Exhibit 146). Indeed on a 1m lookback, gamma points have been trading 1.1-1.2x realized. Vega products, on the other hand, are trading below realized on both 1m and 3m lookbacks. In other words, the demand for optionality outpaced the large moves observed on the week.

Exhibit 145: Current implied/realized volatilities on a 1m lookback...

Expiry \ Tail	1y	2y	5y	10y	30y
1m	1.28	1.20	1.26	1.25	1.20
3m	1.12	1.14	1.19	1.18	1.13
6m	1.06	1.08	1.15	1.15	1.10
1y	1.04	1.07	1.13	1.14	1.10
2y	1.02	1.04	1.09	1.10	1.06
3y	0.98	1.00	1.06	1.05	1.01
5y	0.97	0.98	1.00	0.99	0.94
10y	0.89	0.89	0.87	0.86	0.81

Source: S&P Global, Morgan Stanley Research
Note: Variances are time weighted to capture the aging of forward rate

Exhibit 146: ...and on a longer 3m lookback

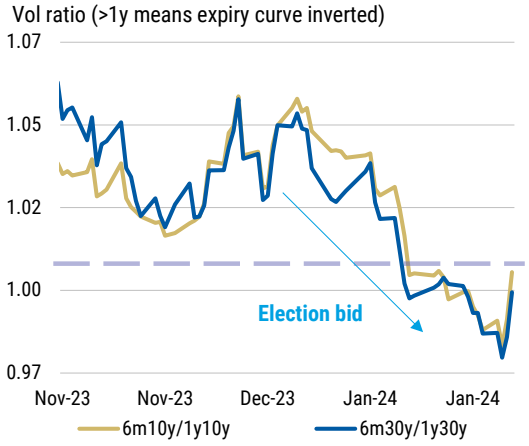
Expiry \ Tail	1y	2y	5y	10y	30y
1m	1.15	1.00	0.97	0.95	0.95
3m	1.02	0.96	0.93	0.92	0.91
6m	0.94	0.90	0.90	0.90	0.90
1y	0.87	0.86	0.88	0.90	0.90
2y	0.82	0.82	0.86	0.88	0.87
3y	0.79	0.80	0.84	0.85	0.84
5y	0.78	0.78	0.79	0.80	0.78
10y	0.72	0.72	0.71	0.71	0.68

Source: S&P Global, Morgan Stanley Research
Note: Variances are time weighted to capture the aging of forward rate

Near-term uncertainty cheapening election vol

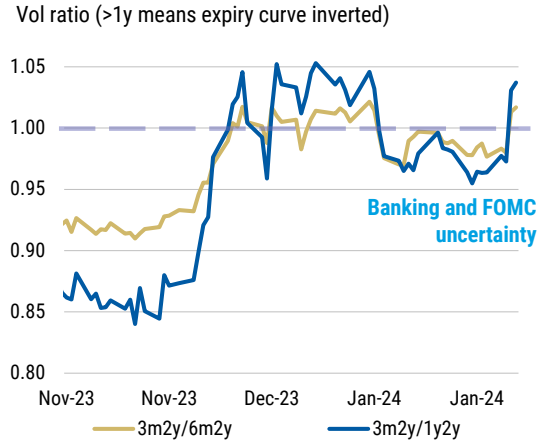
The US election is just over nine months away, and volatility markets have been trading accordingly. Since November last year, 1y expiry vols have included the election period in their optionality. Accordingly, the 1y expiry term structure has been steepening. Exhibit 147 shows this concisely, with the 6m10y/1y10y and 6m30y/1y30y ratios decreasing since November.

Exhibit 147: 1y expiries have been richening vs. 6m expiries...



Source: S&P Global, Morgan Stanley Research

Exhibit 148: ...though recent near-term uncertainty has led to some flattening



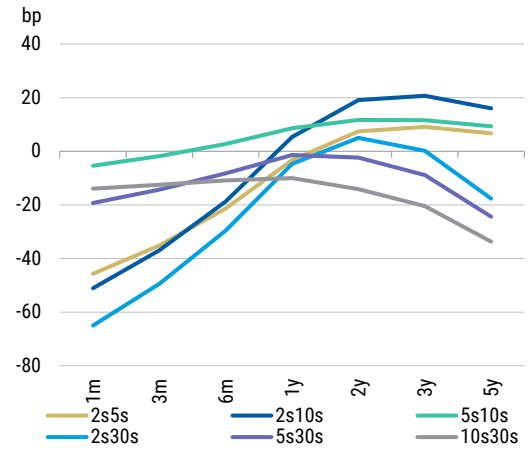
Source: S&P Global, Morgan Stanley Research

The uncertainty around near-term policy has led to a flattening of the expiry term structure this past week. Indeed, 3m expiries richenened to the point of re-inverting versus 6m and 1y expiries (see Exhibit 148). This suggests that current levels could prove an attractive entry point for investors who would like to enter into a long-election vol trade via expiry switches.

Cheap 2y2s30s vol, rich 1y10s30s vol

The forward swap term structure sees the 2s30s curve inverted for some time. Indeed, current pricing does not see a reversion to a positive 2s30s curve for the next two years (see Exhibit 149). This is interesting, as 2y expiry 2s30s curve vol is trading near 1y lows (see Exhibit 150).

Exhibit 149: Forward pricing sees inversion for some time



Source: Morgan Stanley Research

Exhibit 150: Implied curve vol on a 1y lookback

	2s5s	2s10s	5s10s	2s30s	5s30s	10s30s
1m	6%	11%	23%	15%	8%	6%
3m	9%	17%	8%	15%	12%	6%
6m	8%	19%	7%	16%	13%	16%
1y	10%	11%	4%	12%	11%	53%
2y	5%	2%	7%	8%	24%	51%
3y	5%	2%	6%	11%	53%	41%
5y	1%	15%	38%	37%	54%	50%

Source: S&P Global, Morgan Stanley Research

The cheapness in 2y2s30s curve vol can further be gleaned by comparing its implied vol to realized moves over the past year. On this metric, 1y2s30s curve vol is trading 0.87x versus how the underlying has moved over the past year (see Exhibit 151). Shifting to a 3m lookback finds many points trading rich to realized, though 2y2s30s is an exception with a ratio below parity (see Exhibit 152).

We also note that the market is pricing the 10s30s curve near unchanged over the next year, before re-inverting. The flattening priced starting in two years has resulted in elevated vols on this curve. Indeed, 10s30s vols are among the few points trading above 1y 50% percentiles (see Exhibit 150), and screen rich on 3m and 1y implied/realized metrics (see Exhibit 151 and Exhibit 152).

Exhibit 151: Current implied vs. variance weighted 1y realized vol of aged forward points

	2s5s	2s10s	5s10s	2s30s	5s30s	10s30s
1m	0.92	1.06	1.11	1.03	1.08	1.13
3m	0.93	0.98	0.96	0.91	1.00	1.01
6m	0.92	0.97	0.97	0.87	0.97	1.03
1y	0.95	0.97	1.00	0.87	0.98	1.06
2y	0.90	0.89	0.99	0.80	0.95	1.05
3y	0.89	0.85	0.98	0.75	0.95	1.00
5y	0.85	0.81	1.00	0.70	0.88	0.95

Source: S&P Global, Morgan Stanley Research

Exhibit 152: Current implied vs. variance weighted 3m realized vol of aged forward points

	2s5s	2s10s	5s10s	2s30s	5s30s	10s30s
1m	1.34	1.40	1.31	1.36	1.33	1.43
3m	1.29	1.27	1.14	1.18	1.21	1.26
6m	1.23	1.22	1.15	1.10	1.17	1.27
1y	1.21	1.18	1.17	1.06	1.17	1.31
2y	1.09	1.04	1.14	0.95	1.13	1.29
3y	1.06	0.99	1.13	0.88	1.12	1.23
5y	1.02	0.94	1.15	0.82	1.04	1.17

Source: S&P Global, Morgan Stanley Research

USH4 optionality worth a buy?

The USH4 futures contract displays a high degree of optionality: currently, the cheapest-to-deliver (CTD) net basis is worth 7.3 cents, or 2.3 ticks, reflecting a high value of the short position's option to deliver another bond if the CTD switches. High optionality has existed over the most recent cycles and is driven by a high probability of CTD switches.

We see two reasons for this:

1. Probability of CTD switches: the deliverable basket is large, and includes bonds with similar yields, coupons, and maturities that are similarly close to being the CTD, making the likelihood of a switch high.
2. Magnitude of the switch option: the deliverable basket includes bonds with a wide range of maturities, meaning that positive yield curve shifts can readily shift the CTD to a higher-maturity bond, and negative yield curve shifts can shift the CTD to a lower-maturity bond. The range of possible CTD switches contributes to a large magnitude of the option.

Exhibit 153: USH4 deliverable bond net bases (in dollar terms) under parallel forward curve shifts

Yield Shift (bp)	4.5 Aug39s	4.625 Feb40s	4.75 Feb41s	4.375 May41s	2.375 Feb42s	3.875 Feb43s	3.875 May43s	3 May45s
-150	0.00	0.43	1.39	2.04	5.58	4.67	5.01	9.04
-120	0.00	0.34	1.08	1.61	4.64	3.77	4.05	7.52
-90	0.00	0.25	0.80	1.22	3.76	2.95	3.18	6.13
-60	0.00	0.17	0.55	0.86	2.95	2.20	2.38	4.86
-30	0.00	0.10	0.32	0.54	2.20	1.51	1.66	3.71
0	0.00	0.03	0.11	0.24	1.51	0.89	1.00	2.66
30	0.08	0.05	0.00	0.04	0.93	0.39	0.46	1.76
60	0.29	0.21	0.05	0.00	0.49	0.06	0.11	1.05
90	0.74	0.62	0.35	0.22	0.27	0.00	0.02	0.61
120	1.22	1.06	0.71	0.48	0.11	0.01	0.00	0.26
150	1.72	1.54	1.10	0.79	0.02	0.08	0.05	0.00

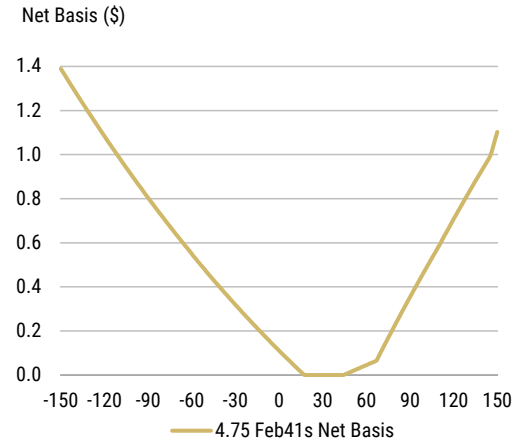
Source: Morgan Stanley Research, Bloomberg

Under forward yield curve shifts between -150bp and 150bp, 8 different bonds can become the CTD of the USH4 contract. In Exhibit 153 , we show the net bases of these bonds under different shifts to the forward curve, highlighting the CTD under each shift.

Notice that under very positive and very negative yield shifts, the net bases of non-CTD bonds grow. Accordingly, we can think of a long basis position as a long volatility position on yields: when yields shift further from the range in which a bond is the CTD (and its net basis is zero), the bond's net basis grows. We illustrate this dynamic in Exhibit 154 .

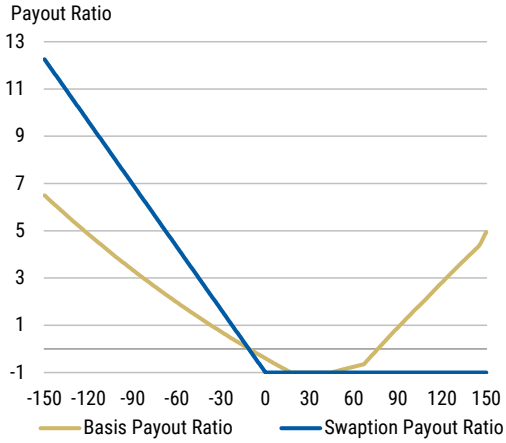
In Exhibit 155 , we plot the payout ratio – the change in position value between now and delivery or expiry divided by the cost of the position – for a long basis position in the USH4 futures contract and the 4.75 Feb41s against various parallel shifts in the forward curve, along with the payouts from being long a 1m forward receiver swaption that expires in February 2041 (approximately a 1m17y receiver swaption).

Exhibit 154: 4.75 Feb41s net basis under parallel yield curve shifts (bp)



Source: Morgan Stanley Research, Bloomberg

Exhibit 155: Payout ratios for long 4.75 Feb41s basis and 1m17y receiver swaption under parallel yield curve shifts (bp)



Source: Morgan Stanley Research, Bloomberg

We notice that the futures basis payout ratios trend upward like the swaption payout ratio as the yield curve rallies. However, the swaption payout ratio is generally higher than the basis payout ratio, suggesting that a long swaption position is a better way to play different rate rally scenarios.

The superior payouts for swaptions may also reflect expensiveness in the US delivery option: according to our fair-value models, the USH4 contract is 2.5 ticks cheap (about 7.8 cents), meaning that US bond bases are overvalued and payouts from long basis positions in US deliverable bonds are low.

Technical Analysis

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Pivot Points

Pivot points are charting levels used by day traders to determine market direction, support, and resistance levels. We calculate weekly pivot points using the previous week's open, high, low, and closing levels.

Exhibit 156: Government bond yield weekly pivots, support and resistance levels

	UST 10y	CAN 10y	DBR 10y	UKT 10y	JGB 20y	ACGB 10y
Weekly resistance 3	4.321	3.666	2.396	4.090	1.606	4.644
Weekly resistance 2	4.196	3.556	2.328	4.004	1.563	4.446
Weekly resistance 1	4.118	3.487	2.286	3.951	1.536	4.324
Weekly pivot high	3.993	3.377	2.219	3.865	1.494	4.126
Weekly pivot low	3.948	3.341	2.194	3.830	1.484	4.080
Weekly Support 1	3.867	3.267	2.151	3.779	1.451	3.928
Weekly Support 2	3.790	3.198	2.109	3.726	1.424	3.806
Weekly Support 3	3.753	3.161	2.092	3.710	1.401	3.701

Source: Morgan Stanley Research

Exhibit 157: Foreign exchange rates weekly pivots, support, and resistance levels

	DXY	EURUSD	USDJPY	GBPUSD	AUDUSD	USDCAD
Weekly resistance 3	104.76	1.0940	150.30	1.2830	0.6669	1.3550
Weekly resistance 2	104.55	1.0895	149.82	1.2770	0.6622	1.3528
Weekly resistance 1	104.33	1.0867	149.28	1.2733	0.6593	1.3505
Weekly pivot high	103.73	1.0822	147.86	1.2672	0.6546	1.3444
Weekly pivot low	103.62	1.0812	147.62	1.2658	0.6535	1.3433
Weekly Support 1	103.41	1.0777	147.14	1.2612	0.6499	1.3411
Weekly Support 2	103.19	1.0749	146.60	1.2575	0.6470	1.3388
Weekly Support 3	102.92	1.0725	145.96	1.2544	0.6446	1.3360

Source: Morgan Stanley Research

Exhibit 158: Foreign exchange rates weekly pivots, support, and resistance levels

	EURJPY	EURCHF	EURNOK	EURSEK	NOKSEK	AUDNZD
Weekly resistance 3	162.42	0.9440	11.6077	11.4519	1.0146	1.0866
Weekly resistance 2	161.37	0.9406	11.5692	11.3923	1.0069	1.0821
Weekly resistance 1	160.72	0.9384	11.5287	11.3555	1.0021	1.0793
Weekly pivot high	159.66	0.9350	11.4203	11.2959	0.9943	1.0748
Weekly pivot low	159.27	0.9338	11.4010	11.2722	0.9923	1.0735
Weekly Support 1	158.61	0.9315	11.3625	11.2363	0.9866	1.0703
Weekly Support 2	157.96	0.9294	11.3220	11.1995	0.9818	1.0675
Weekly Support 3	157.70	0.9282	11.2733	11.1873	0.9781	1.0658

Source: Morgan Stanley Research

Cyclical and Secular Trends

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Government Bonds

Exhibit 159: Summary of cyclical (tactical & strategic) and secular bull, bear, and range-bound rates markets

					Cyclical	Cyclical	Secular
	Daily	Daily	Daily		Tactical	Strategic	
	Last	Cloud Lower	Cloud Upper	200d MA	Daily	Weekly	Monthly
UST 2y	4.364	4.476	4.743	4.698	Bull Market	Range bound	Bear Market
UST 5y	3.983	4.013	4.388	4.183	Bull Market	Bear Market	Bear Market
UST 10y	4.020	4.011	4.400	4.114	Range bound	Bear Market	Bear Market
UST 30y	4.221	4.149	4.558	4.260	Range bound	Bear Market	Bear Market
DBR 2y	2.569	2.629	2.812	2.923	Bull Market	Range bound	Bear Market
DBR 5y	2.166	2.115	2.364	2.464	Range bound	Range bound	Bear Market
DBR 10y	2.241	2.150	2.433	2.479	Range bound	Range bound	Bear Market
DBR 30y	2.439	2.354	2.651	2.634	Range bound	Range bound	Bear Market
UKT 2y	4.421	4.268	4.516	4.662	Range bound	Range bound	Bear Market
UKT 5y	3.909	3.757	4.086	4.237	Range bound	Range bound	Bear Market
UKT 10y	3.918	3.747	4.086	4.204	Range bound	Range bound	Bear Market
UKT 30y	4.552	4.278	4.609	4.570	Range bound	Bear Market	Bear Market
JGB 10y	0.672	0.659	0.765	0.618	Range bound	Bear Market	Bear Market
JGB 20y	1.459	1.382	1.501	1.316	Range bound	Bear Market	Bear Market
JGB 30y	1.757	1.597	1.694	1.556	Bear Market	Bear Market	Bear Market
JGB 40y	2.001	1.813	1.925	1.758	Bear Market	Bear Market	Bear Market
ACGB 2y	3.664	3.874	4.090	3.922	Bull Market	Range bound	Bear Market
ACGB 5y	3.594	3.823	4.098	3.871	Bull Market	Range bound	Bear Market
ACGB 10y	3.978	4.132	4.445	4.140	Bull Market	Bear Market	Bear Market
ACGB 20y	4.291	4.415	4.757	4.455	Bull Market	Bear Market	Bear Market
NZGB 2y	4.575	4.761	4.839	5.195	Bull Market	Range bound	Range bound
NZGB 5y	4.329	4.375	4.497	4.695	Bull Market	Range bound	Bull Market
NZGB 10y	4.518	4.506	4.631	4.770	Range bound	Bear Market	Bear Market
CAN 2y	4.062	4.056	4.397	4.419	Range bound	Range bound	Bear Market
CAN 5y	3.480	3.356	3.754	3.729	Range bound	Range bound	Bear Market
CAN 10y	3.380	3.254	3.609	3.512	Range bound	Bear Market	Bear Market
CAN 30y	3.287	3.094	3.412	3.374	Range bound	Bear Market	Bear Market

Source: Morgan Stanley Research, Bloomberg
In The Tactical Bull Market Is Back, we discussed a simple methodology based on the Ichimoku Kinko charting technique for classifying market movements as bullish, bearish, or range bound. Then, we define whether the market movement is cyclical or secular in nature. A cyclical move is shorter term in nature, and a secular move is longer term in nature. For cyclical moves, we further divide them into tactical and strategic. We use daily data to inform tactical moves, and weekly data to inform strategic moves. We use monthly data to inform secular movements.

Foreign Exchange

Exhibit 160: Summary of cyclical (tactical and strategic) and secular bull, bear, and range-bound FX markets

					Cyclical	Cyclical	Secular
	Daily	Daily	Daily		Tactical	Strategic	
	Last	Cloud Lower	Cloud Upper	200d MA	Daily	Weekly	Monthly
DXY	103.92	102.18	103.97	103.55	Range bound	Range bound	Bull Market
USDJPY	148.38	143.79	146.08	144.64	Bull Market	Bull Market	Bull Market
USDCAD	1.3463	1.3369	1.3538	1.3477	Range bound	Bull Market	Bull Market
USDCHF	0.8668	0.8558	0.8723	0.8848	Range bound	Bear Market	Bear Market
USDNOK	10.6042	10.4234	10.6657	10.6603	Range bound	Bull Market	Bull Market
USDSEK	10.5016	10.1755	10.5750	10.6601	Range bound	Bear Market	Bull Market
EURUSD	1.0788	1.0828	1.0974	1.0839	Bear Market	Range bound	Bear Market
GBPUSD	1.2631	1.2449	1.2689	1.2564	Range bound	Bull Market	Bear Market
AUDUSD	0.6512	0.6571	0.6740	0.6576	Bear Market	Bear Market	Bear Market
NZDUSD	0.6065	0.6072	0.6236	0.6088	Bear Market	Range bound	Bear Market
EURJPY	160.07	157.48	158.77	156.72	Bull Market	Bull Market	Bull Market
NOKSEK	0.9901	0.9717	0.9801	1.0003	Bull Market	Bear Market	Bull Market
AUDNZD	1.0739	1.0779	1.0801	1.0803	Bear Market	Bear Market	Bull Market
USDBRL	4.9704	4.8975	4.9794	4.9230	Range bound	Range bound	Range bound
USDMXN	17.14	17.18	17.69	17.33	Bear Market	Bear Market	Bear Market
USDARS	827.38	578.65	692.05	392.00	Bull Market	Bull Market	Bull Market
USDCLP	947.55	879.47	904.17	861.30	Bull Market	Bull Market	Bull Market
USDCOP	3,935.80	3,984.82	4,148.17	4,140.30	Bear Market	Bear Market	Bull Market
USDPEN	3.8310	3.7295	3.7755	3.7198	Bull Market	Bull Market	Bull Market
USDZAR	18.90	18.53	18.69	18.75	Bull Market	Bull Market	Bull Market
USDTRY	30.4887	28.6187	29.0788	26.5889	Bull Market	Bull Market	Bull Market
USDILS	3.6539	3.6199	3.8097	3.7432	Range bound	Bull Market	Bull Market
USDRUB	118.69	#N/A	#N/A	#N/A	#N/A	Bull Market	Bull Market
USDPLN	4.0012	3.9513	4.0711	4.1118	Range bound	Bear Market	Bull Market
USDCZK	23.1221	22.3534	22.7385	22.3474	Bull Market	Range bound	Range bound
USDHUF	356.04	349.11	356.00	350.81	Bull Market	Range bound	Bull Market
USDCNY	7.1935	7.1339	7.2090	7.1744	Range bound	Bull Market	Bull Market
USDIDR	15,658.00	15,522.75	15,661.00	15,302.37	Range bound	Bull Market	Bull Market
USDINR	82.93	83.16	83.20	82.77	Bear Market	Bull Market	Bull Market
USDKRW	1,322.35	1,304.99	1,321.40	1,316.98	Bull Market	Range bound	Bull Market
USDMYR	4.7170	4.6626	4.7062	4.6347	Bull Market	Bull Market	Bull Market
USDPHP	55.93	55.68	56.11	55.94	Range bound	Range bound	Bull Market
USDSGD	1.3429	1.3299	1.3473	1.3466	Range bound	Range bound	Bear Market
USDTWD	31.2320	31.1890	31.6880	31.4438	Range bound	Bull Market	Bull Market
USDTHB	35.2500	35.0470	35.7550	35.1515	Range bound	Range bound	Bull Market
GOLD	2,040	2,022	2,052	1,965	Range bound	Bull Market	Bull Market
SILVER	22.69	23.82	24.14	23.46	Bear Market	Range bound	Range bound

CRUDE OIL	72.28	73.11	77.00	75.41	Bear Market	Bull Market	Bull Market

Source: Morgan Stanley Research, Bloomberg

G4 Smarter (beta) Trading Strategy

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Enhancements to a G4 10y government bond futures momentum strategy have produced higher Sharpe ratios and stronger returns, relative to total return government bond indices for the G4, US, Germany, Japan, and the UK since 2000. See A "Smarter" (Beta) Way to Trade G4 10y Futures Duration? for more information on these strategies.

Trading Strategy 1 – "Trade Longs/Fade Shorts"

When the 5-day moving average crosses above the 20-day moving average, buy the futures contract (long duration) and hold for a 25-business-day period. When the 5-day moving average crosses below the 20-day moving average, buy the futures contract and hold for a 25-business-day period. In short, this strategy buys futures when the Simple Moving Average Crossover (SMAX) generates both a long and a short signal, given the historical outperformance of long signals traded long and underperformance of short signals traded short. Given that the SMAX could generate both a long and a short signal within the predefined holding period, an investor may have a 200% long position since each of the two signals would be traded in separate portfolio sleeves.

Trading Strategy 2 – Trade "Longs Only"

When the 5-day moving average crosses above the 20-day moving average, buy the futures contract (long duration) and hold for a 25-business-day period. When the 5-day moving average crosses below the 20-day moving average, do nothing. In short, an investor ONLY trades long signals initiated by the SMAX given their historical precedent to outperform

Exhibit 161: Trading signals for G4 smarter (beta) trading strategy

Current Risk, G4 10y Futures	G4 Strategy Weight	Trade Longs Portfolio	Fade Shorts Portfolio	Total Risk Trade Longs Only	Total Risk Trade Longs/Fade Shorts (max 200%)	Trade Longs Portfolio Entry Date	Trade Longs Portfolio Exit Date	Fade Shorts Portfolio Entry Date	Fade Shorts Portfolio Exit Date
JB 10y Future	32.50%	0%	100%	0%	100%	-	-	1/25/2024	3/4/2024
GE 10y Future	29.25%	100%	100%	100%	200%	2/2/2024	3/8/2024	1/9/2024	2/13/2024
US 10y Future	30.50%	100%	100%	100%	200%	2/2/2024	3/11/2024	1/9/2024	2/14/2024
UK 10y Future	7.75%	0%	100%	0%	100%	2/5/2024	3/11/2024	1/9/2024	2/13/2024

Source: Morgan Stanley Research

Bond Market Indicators

Our BMI(10) models are neutral to bearish for all regions. Vol-adjusted carry is bearish for all regions, momentum is bullish with the exception of Japan, and equity market signals are bullish except for Japan. Business cycle indicators are bearish for Germany, and the U.K. FX signals are bearish for the U.S., the U.K., and New Zealand.

Our BMI(2) models are bearish for the U.K., bullish for Japan, and neutral otherwise. Vol-adjusted carry is bullish for Japan and bearish otherwise. Momentum is bearish for the U.K. only. Equity market signals and business cycle indicators are the same as for BMI(10). FX signals are bullish for Germany, Japan, and New Zealand.

Our iBMI models are neutral for all regions. Oil signal turned bearish across all regions. Momentum signal grew more bearish for TIPS, grew less bearish for UKTi & HICPxT, and grew more bullish for JGBi. Equities signal turned bearish for TIPS, grew more bearish for UKTi & HICPxT, and grew more bullish for JGBi. Value signal grew more bullish for TIPS, remained as bullish for UKTi, grew less bullish for HICPxT, and grew less bearish for JGBi.

Latest readings

Exhibit162: Morgan Stanley Bond Market Indicators - BMI(10)

	Vol-Adjusted Carry	Momentum	Equity Markets	Business Cycle	FX	Average	Overall
US	-9.2 (-8.9)	5.6 (5.3)	2.1 (0.6)	2.8 (1.6)	-6.2 (-2.1)	-1.0 (-0.7)	**0.0 (0.0)**
DE	-9.9 (-9.9)	2.1 (2.3)	3.6 (3.3)	-0.2 (0.5)	6.0 (3.9)	0.3 (0.0)	**0.0 (0.0)**
UK	-7.8 (-7.5)	1.0 (3.5)	5.2 (4.7)	-7.7 (-7.9)	-9.4 (-8.9)	-3.7 (-3.2)	**-3.7 (-3.2)**
JP	-6.9 (-5.7)	-0.9 (2.9)	-2.4 (-3.6)	2.1 (-5.6)	8.4 (6.4)	0.1 (-1.1)	**0.0 (0.0)**
AU	-3.6 (-3.6)	2.0 (2.5)	3.6 (1.2)	4.0 (-1.1)	1.5 (-6.2)	1.5 (-1.4)	**0.0 (0.0)**
NZ	-7.0 (-6.6)	3.0 (4.2)	1.9 (0.2)	1.5 (2.9)	-4.2 (-5.8)	-1.0 (-1.0)	**0.0 (0.0)**
CA	-9.8 (-9.7)	1.7 (2.5)	3.3 (2.3)	4.1 (4.1)	0.4 (8.1)	-0.1 (1.5)	**0.0 (0.0)**

Source: Morgan Stanley Research

Note: Positive # = long duration; Negative # = short duration, (#) = previous week Thursday close which may differ from the post-nonfarm payroll update, Indicators bounded between -10 and +10, Overall signal set to zero if abs(Signal)<=1.5

Exhibit 163: Morgan Stanley Bond Market Indicators - BMI(2)

	Vol-Adjusted Carry	Momentum	Equity Markets	Business Cycle	FX	Average	Overall
US	-9.9 (-9.9)	8.9 (9.0)	2.1 (0.6)	2.8 (1.6)	-5.7 (-5.2)	-0.4 (-0.8)	**0.0 (0.0)**
DE	-10.0 (-10.0)	0.8 (1.7)	3.6 (3.3)	-0.2 (0.5)	3.9 (6.1)	-0.4 (0.3)	**0.0 (0.0)**
UK	-5.7 (-4.6)	-1.0 (3.6)	5.2 (4.7)	-7.7 (-7.9)	-8.7 (-9.4)	-3.6 (-2.7)	**-3.6 (-2.7)**
JP	9.1 (8.9)	5.5 (9.8)	-2.4 (-3.6)	2.1 (-5.6)	9.1 (9.1)	4.7 (3.7)	**4.7 (3.7)**
AU	-7.4 (-6.0)	1.6 (2.3)	3.6 (1.2)	4.0 (-1.1)	-2.0 (-0.5)	-0.0 (-0.8)	**0.0 (0.0)**
NZ	-9.6 (-9.5)	2.9 (5.3)	1.9 (0.2)	1.5 (2.9)	1.2 (-2.2)	-0.4 (-0.7)	**0.0 (0.0)**
CA	-9.7 (-9.6)	0.7 (1.8)	3.3 (2.3)	4.1 (4.1)	-0.5 (1.2)	-0.4 (-0.0)	**0.0 (0.0)**

Source: Morgan Stanley Research
Note: Positive # = long duration; Negative # = short duration, (#) = previous week Thursday close which may differ from the post-nonfarm payroll update, Indicators bounded between -10 and +10, Overall signal set to zero if abs(Signal)<=1.5

Exhibit 164: Morgan Stanley Bond Market Indicators - xBMIs

	Long US	Long DE	Long UK	Long JP	Long AU	Long NZ	Long CA
vs. US	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
vs. DE	0.0 (0.0)	0.0 (0.0)	-2.0 (-1.6)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
vs. UK	0.0 (0.0)	2.0 (1.6)	0.0 (0.0)	1.9 (0.0)	2.6 (0.0)	0.0 (0.0)	1.8 (2.3)
vs. JP	0.0 (0.0)	0.0 (0.0)	-1.9 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
vs. AU	0.0 (0.0)	0.0 (0.0)	-2.6 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
vs. NZ	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
vs. CA	0.0 (0.0)	0.0 (0.0)	-1.8 (-2.3)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)

Source: Morgan Stanley Research
Note: Positive # = long cross market spreads; Negative # = short cross market spread, (#) = previous week Thursday close which may differ from the post-nonfarm payroll update, Indicators bounded between -15 and +15, Signal is set to zero if abs(Signal)<=2

Exhibit165: Morgan Stanley Euro Sovereign Bond Market Indicators - eBMI

	Business Cycle Surprises	Momentum	Vol. Adj. Carry	Supply	Risky Assets	Overall
Periphery vs. Core	-2.6 (-2.4)	5.6 (2.9)	4.5 (3.8)	4.8 (4.8)	9.7 (8.8)	**4.4 (3.6)**
Semi-Core vs. Core	5.9 (6.6)	3.8 (0.2)	9.8 (9.7)	-1.5 (-1.5)	-6.8 (-9.4)	**2.2 (1.1)**
Periphery vs. Semi-Core	-4.3 (-4.5)	0.9 (1.3)	-2.7 (-2.9)	3.2 (3.2)	8.3 (9.1)	**2.2 (2.5)**

Source: Morgan Stanley Research
Note: Positive # = long spreads; Negative # = short spreads, (#) = previous week Thursday close which may differ from the post-nonfarm payroll update, Indicators bounded between -10 and +10.

Exhibit166: Morgan Stanley Inflation Bond Market Indicators - iBMI

Market	Oil	Momentum	Equities	Value	Average	Overall
TIPS	-1.2 (2.0)	-0.9 (-0.8)	-0.4 (0.3)	6.1 (5.6)	0.9 (1.8)	**0.0 (1.8)**
UKTi	-1.4 (1.9)	-6.0 (-7.5)	-2.1 (-2.0)	6.4 (6.4)	-0.8 (-0.3)	**0.0 (0.0)**
HICPxT	-0.9 (2.2)	-5.3 (-6.2)	-1.0 (-0.9)	6.9 (7.0)	-0.1 (0.5)	**0.0 (0.0)**
JGBi	-0.6 (2.7)	2.8 (1.7)	2.2 (2.8)	-0.7 (-2.4)	0.9 (1.2)	**0.0 (1.2)**

Source: Morgan Stanley Research
Note: Positive # = long inflation breakeven; Negative # = short inflation breakeven, (#) = previous week Thursday close which may differ from the post-nonfarm payroll update, Indicators bounded between -10 and +10, Overall signal set to zero if abs(Signal)<=1.0

Swap Spread Indicators

Our SSI(2) models imply that 2y spreads are roughly 29.2bp wide to fair value on a 6m rolling lookback. The 2std threshold is met. Our model-implied fair value can be found on Bloomberg using the ticker MSSIUS2 Index.

Our SSI(10) models imply that 10y spreads are 57.3bp tight on a 6m rolling lookback. The 2std trading threshold is met. Our model-implied fair value can be found on Bloomberg using the ticker MSSIUS10 Index.

Our SSI(30) models suggest that 30y spreads are 62.2bp tight to fair value on our 2y lookback window. The 2std threshold is met. Our model-implied fair value can be found on Bloomberg using the ticker MSSIUS30 Index.

Based on each of the SSI models, the 2s10s spread curve is ~86.5bp flat to fair value using a 6m lookback. The 10s30s spread curve is about ~39.9bp flat to fair value using our 2y lookback window.

Detail on the variable selection and model construction of these Swap Spread Indicators can be found in Modeling Swap Spreads. Within the piece, we discuss the various fundamental and flow-related drivers of 2y, 10y, and 30y spreads, and use these variables to construct multivariate regression models. We then develop and test trading strategies that employ these models. Updates to model-implied fair values, as well as backtesting of trading signals, can be found below.

Latest readings

Exhibit167: Morgan Stanley Swap Spread Indicators - Model Implied Fair Values

	6m Rolling Lookback Window	2y Rolling Lookback Window	5y Rolling Lookback Window	Matched-Maturity Swap Spread Level
2y Swap Spreads	29.2	29.4	10.5	74.3
10y Swap Spreads	-57.3	-22.3	-13.2	-19.9
30y Swap Spreads	-83.2	-62.2	-50	-79.7
2s10s Swap Spread Curve	-86.5	-51.8	-23.8	-94.2
2s30s Swap Spread Curve	-112.3	-91.6	-60.6	-154
10s30s Swap Spread Curve	-25.9	-39.9	-36.8	-59.8

Source: Morgan Stanley Research

Note: The levels shown in the table are the model-implied fair values for each of the spread sectors using various lookback windows. For curves, we calculate model-implied fair value based on the difference between the model-implied fair value of the two individual spreads that make up the spread curve.

Exhibit168: Morgan Stanley Swap Spread Indicators - Trading Signals

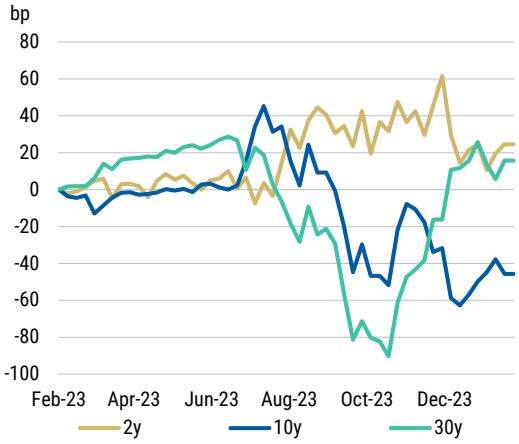
	Trading Signal*	Trade with 0.5sd threshold?	Trade with 1sd threshold?	Trade with 2sd threshold?
2y Swap Spreads	Tighten	Y	Y	Y
10y Swap Spreads	Tighten	Y	Y	Y
30y Swap Spreads	Widen	Y	Y	N

Source: Morgan Stanley Research

Note: The thresholds are derived from the standard deviation of the difference between model-implied fair value and market values for the preferred rolling window for each spread sector.
*We use our preferred lookback windows for the trading signals. Our preferred lookback windows, based on regression fit an explanatory power, are 6m for 2y and 10y spreads and 2y for 30y spreads.
**For curves, we use 2y rolling regression lookback windows for consistency when constructing the trading signals.

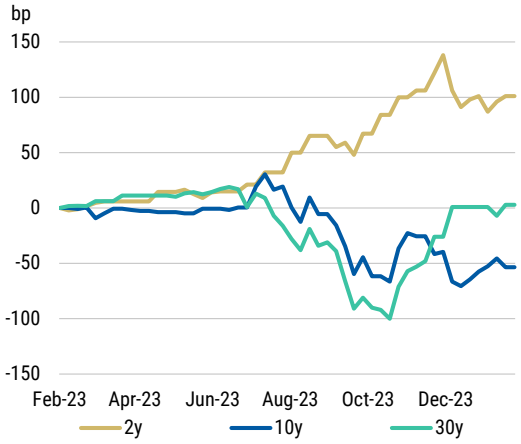
Backtesting results

Exhibit 169: Backtesting results for each spread sector using preferred lookback window and no trading threshold (last 12 months)



Source: Morgan Stanley Research
*Our preferred lookback windows, based on regression fit an explanatory power, are 6m for 2y and 10y spreads and 2y for 30y spreads

Exhibit 170: Backtesting results for each spread sector using preferred lookback window and a trading threshold of 1.0sd (last 12 months)



Source: Morgan Stanley Research
*Our preferred lookback windows, based on regression fit an explanatory power, are 6m for 2y and 10y spreads and 2y for 30y spread

Note about backtesting: The performance data provided is a hypothetical illustration of mathematical principles, it does not predict or project the performance of an investment or investment strategy. Past performance is no guarantee of future results.

Government Bond Supply

In the US, total coupon issuance (new 3y, 10y, 30y) settling in mid October is $120bn versus $2.5bn coupons and $36bn redemptions, resulting in net issuance of $81.5bn. **In the euro area,** we estimate about €21.5bn of issuance (from GER, AUT, FRA, SPA) versus no coupons but and €21.5bn redemptions (from GER), resulting in zero bn of net issuance. **In the UK,** £7.75bn of UKTs will be issued against no coupons or redemptions. **In Japan,** 10y JGB will be issued for ¥2600bn and there will be an auction for enhanced liquidity for ¥500bn, against no coupons or redemptions. **In Canada,** 2y CAN 0.5% Nov 2023 will be issued for $4bn against no cash flow. **In Australia,** ACGB 1.75% Nov 2032 and ACGB 4.75% Apr 2027 will be issued for $1bn each, against no cash flow. **In New Zealand,** NZGB May 2024, NZGB May 2032, NZGB May 2041 will be issued for $200mn, $200mn and $100mn, respectively, against no cash flow. **In China,**

Exhibit 171: Sovereign supply calendar

Monday	Tuesday	Wednesday	Thursday	Friday
4-OCT	**5-OCT**	**6-OCT**	**7-OCT**	**8-OCT**
	GER: DBRi 0.1% Apr 2033 Tap, €0.5bn; DBRi 0.1% Apr 2046 Tap, €0.2bn AUT: RAGB Auction, €1.265bn RAGB Apr 2025, RAGB Feb 2031 UK: UKT 0.25% Gilt 2025, £3bn UK: UKT 1.125% Gilt 2039, £2.25bn JPN: 10y JGB, ¥2600bn	GER: OBL 9 Oct 2026 Tap, €4bn UK: UKT 0.5% Gilt 2029, £2.5bn AUS: ACGB 1.75% Nov 2032, $1bn CAN: 2y CAN 0.5% Nov 2023, $4bn	FRA: Long Term OAT Auction, €10-11bn OAT 2.5% May 2030, OAT Nov 2031, OAT 0.75% May 2053, OAT 1.75% May 2066 SPA: SPGB Auction, €5-6bn* SPGB 2028, SPGB 0.5% 2031, SPGBei 0.7% 2033, SPGB 2.7% 2048 JPN: Auction for Enhanced Liquidity, ¥500bn NZ: NZGB May 2024, $200mn; NZGB May 2032, $200mn; NZGB May 2041, $100mn	AUS: ACGB 4.75% Apr 2027, $1bn
11-OCT	**12-OCT**	**13-OCT**	**14-OCT**	**15-OCT**
***EU: Possible New 20-25y Green EU Syndication, €7bn*	GER: BKO 15 Sept-2023 Tap, €5bn NETH: DSL Auction, €2-2.5bn* UK: UKT 0.5% 2061, £1.75bn* US: New 3y UST, $58bn* US: 10y UST Re-opening, $38bn* JPN: 30y JGB, ¥900bn*	GER: DBR 15 Aug 2052 Tap, €1bn ITA: BTP Auction, €9-9.25bn* UK: UKTi 0.125% Gilt 2051, £1.5bn* **POR: Possible OT Auction, €1bn* US: 30y UST Re-opening, $24bn* CAN: 5y CAN, $4bn*	IRE: IRISH Auction, €1-1.5bn* JPN: 5y JGB, ¥2500bn* NZ: NZGB May 2026, $200mn; NZGB May 2031, $200mn; NZGB May 2037, $100mn	
18-OCT	**19-OCT**	**20-OCT**	**21-OCT**	**22-OCT**

***UK: New Green UKT 31 July 2053,	JPN: 20y JGB, ¥1200bn*	GER: DBRg 15 Aug 2031 Tap, €3bn US: 20y Re-opening, $24bn* CAN: 2y CAN, $4.5bn*	FRA: Medium Term Auction, €10-11bn* FRA: Linker Auction, €1-1.5bn* SPA: SPGB Auction, €5-6bn* US: New 5y TIPS, $19bn* NZ: NZGB May 2024, $200mn; NZGB May 2032, $200mn; NZGB May 2041, $100mn CAN: 10y CAN, $5.5bn*

Source: Morgan Stanley Research, Treasuries, WIND
* Morgan Stanley estimate. **Possible euro area auction not announced by the treasury yet. ***Syndication likely to happen in the respective week. **China: For CGB, it indicates China Government Bond, issued by the central government. Discounted and Saving CGBs are not included. ***China: For LGB, it indicates Chinese Local Government Bond, issued by provincial governments.

In Case You Missed It

US Economics & Global Macro Strategy: Correction: FOMC Reaction: March Is Out, B/S Discussions to Begin

1 Feb 2024

According to Chair Powell, it isn't likely the Committee would be confident to cut by March. The Fed will be cutting rates this year, but is in no hurry. We continue to call for a June start. Our strategists stay long duration via 5y UST, and neutral agency MBS.

Global Macro Strategy: Positions and Flows Report

30 Jan 2024

We provide the latest information on CFTC Non-Commercial Futures Positions, Traders in Financial Futures, Primary Dealer Positions, Large Commercial Bank Positions, Foreign Central Bank Positions and TIC Foreign Flows.

Global Macro Strategy: Global FX Positioning: Investors Add Short EUR and CAD Positions Post ECB and BoC

29 Jan 2024

In the week ending Friday, January 26, options pricing data indicate that investors added long NOK (vs EUR) and SEK (vs EUR) positions, and increased short CAD and EUR positions. In the futures market, most USD shorts were added against GBP, while investors bought USD against AUD and CAD in the week ending Tuesday, January 23.

Global Macro Strategist: Don't Call It a Comeback

27 Jan 2024

We continue to see lower bond yields ahead. The impact of winter weather and fewer fiscal cash flows raise downside risks to activity data for January. The bond market rally to end 2023 wasn't a comeback. It was the start of another bull market – which has been here for years.

Podcast | Thoughts on the Market: Will the U.S. Presidential Election Change Fed Policy?

25 Jan 2024

Investors are concerned that the upcoming election might interfere with policy decisions. Here's why our view is different.

Forecasts

Exhibit 172: Morgan Stanley sovereign 2y, 5y, 10y, and 30y yield base case forecasts

	2Y				5Y				10Y				30Y			
	1Q24	2Q24	3Q24	4Q24	1Q24	2Q24	3Q24	4Q24	1Q24	2Q24	3Q24	4Q24	1Q24	2Q24	3Q24	4Q24
US	4.65	4.40	4.05	3.70	4.33	4.15	4.00	3.85	4.35	4.20	4.08	3.95	4.58	4.50	4.45	4.40
Germany	2.60	2.10	1.75	1.60	2.30	1.90	1.70	1.70	2.50	2.10	1.80	1.80	2.75	2.45	2.25	2.30
Japan	0.10	0.15	0.25	0.20	0.35	0.45	0.60	0.55	0.80	0.85	1.00	0.90	1.70	1.70	1.80	1.75
UK	4.40	4.00	3.60	3.20	4.10	3.80	3.50	3.30	3.90	3.70	3.60	3.50	4.60	4.40	4.10	4.00
Canada	4.30	4.20	3.90	3.60	3.75	3.70	3.50	3.30	3.65	3.60	3.45	3.30	3.45	3.40	3.35	3.30
Australia	4.30	4.25	4.10	3.95	4.40	4.35	4.30	4.20	4.65	4.55	4.50	4.40	5.00	4.90	4.80	4.70
New Zealand	5.15	5.00	4.75	4.50	4.80	4.70	4.55	4.40	5.00	4.95	4.90	4.85	5.10	5.05	5.05	5.00
Austria*	15	15	10	10	40	40	35	35	60	55	50	45	65	60	55	50
Netherlands*	15	15	10	10	30	30	25	25	40	35	35	30	30	30	30	30
France*	10	10	10	10	45	45	40	40	65	60	60	55	100	100	95	95
Belgium*	15	15	15	15	50	50	45	45	75	70	70	65	110	110	105	105
Ireland*	5	5	5	5	45	45	40	40	55	55	55	50	75	75	70	70
Spain*	55	50	45	40	85	75	70	65	110	110	105	100	185	180	175	170
Italy*	115	100	90	85	175	160	150	145	220	210	200	190	240	230	225	220
Portugal*	20	20	15	10	85	90	85	80	90	85	80	75	160	145	145	145

Source: Morgan Stanley Research, *Spread to German Bunds

Exhibit 173: Morgan Stanley sovereign 10-year yield bull, base, and bear case forecasts

	Bull				Base				Bear			
	1Q24	2Q24	3Q24	4Q24	1Q24	2Q24	3Q24	4Q24	1Q24	2Q24	3Q24	4Q24
US	3.90	3.30	2.90	2.50	4.35	4.20	4.08	3.95	4.63	4.75	4.90	5.05
Germany	2.40	1.90	1.60	1.50	2.50	2.10	1.80	1.80	2.90	2.80	2.70	2.70
Japan	0.65	0.50	0.45	0.35	0.80	0.85	1.00	0.90	1.05	1.20	1.40	1.80
UK	4.10	3.60	3.20	3.00	3.90	3.70	3.60	3.50	4.70	4.80	4.70	4.60
Canada	3.05	2.75	2.60	2.45	3.65	3.60	3.45	3.30	3.85	3.95	3.95	3.95
Australia	4.00	3.70	3.60	3.50	4.65	4.55	4.50	4.40	4.80	4.90	4.90	4.90
New Zealand	4.50	4.10	4.05	4.00	5.00	4.95	4.90	4.85	5.30	5.40	5.40	5.40
Austria*	60	55	45	45	60	55	50	45	65	60	55	55
Netherlands*	35	35	30	30	40	35	35	30	40	35	35	35
France*	60	60	55	55	65	60	60	55	75	70	65	65
Belgium*	70	70	65	60	75	70	70	65	85	80	75	70
Ireland*	50	55	50	50	55	55	55	50	65	65	60	60
Spain*	100	100	100	95	110	110	105	100	120	115	110	110
Italy*	195	185	180	170	220	210	200	190	250	235	225	220
Portugal*	70	65	65	60	90	85	80	75	115	105	100	100

Source: Morgan Stanley Research, *Spread to German Bunds

Exhibit 174: Morgan Stanley foreign exchange base case forecasts

	1Q24	2Q24	3Q24	4Q24	1Q25	2Q25	3Q25	4Q25
EUR/USD	1.00	1.01	1.02	1.04	1.05	1.07	1.08	1.10
USD/JPY	145	142	140	140	140	139	139	138
GBP/USD	1.14	1.14	1.14	1.15	1.18	1.20	1.23	1.25
USD/CHF	0.94	0.93	0.93	0.91	0.91	0.91	0.91	0.91
USD/SEK	11.80	11.58	11.37	11.06	10.85	10.65	10.46	10.27
USD/NOK	11.90	11.49	11.08	10.58	10.39	10.22	10.04	9.88
USD/CAD	1.41	1.40	1.37	1.36	1.34	1.33	1.31	1.30
AUD/USD	0.61	0.62	0.62	0.63	0.65	0.68	0.70	0.72
NZD/USD	0.57	0.58	0.58	0.59	0.60	0.62	0.63	0.64
EUR/JPY	145	143	143	146	147	149	150	152
EUR/GBP	0.88	0.89	0.89	0.90	0.90	0.89	0.88	0.88
EUR/CHF	0.94	0.94	0.95	0.95	0.96	0.98	0.99	1.00
EUR/SEK	11.80	11.70	11.60	11.50	11.45	11.39	11.34	11.28
EUR/NOK	11.90	11.60	11.30	11.00	10.96	10.93	10.89	10.85
USD/CNY	7.45	7.50	7.48	7.45	7.42	7.38	7.34	7.28
USD/HKD	7.84	7.83	7.81	7.79	7.79	7.78	7.77	7.76
USD/IDR	15900	15700	15600	15500	15356	15213	15069	14926
USD/INR	83.7	83.6	83.0	82.5	81.5	80.4	79.4	78.4
USD/KRW	1350	1340	1320	1290	1281	1271	1262	1253
USD/MYR	4.80	4.77	4.73	4.67	4.60	4.54	4.47	4.40
USD/PHP	57.5	57.0	56.5	56.0	56.0	56.0	56.0	56.0
USD/SGD	1.380	1.377	1.370	1.355	1.356	1.357	1.359	1.360
USD/TWD	32.8	32.6	32.4	31.8	31.6	31.4	31.2	30.9
USD/THB	36.5	36.3	36.0	35.2	35.2	35.1	35.1	35.1
USD/BRL	5.10	5.20	5.25	5.30	5.25	5.20	5.15	5.10
USD/MXN	19.00	20.00	19.50	19.25	19.25	19.25	19.25	19.25
USD/ARS	858.0	1022.0	1172.0	1318.0	1461.0	1612.0	1762.0	1898.0
USD/CLP	930	950	930	925	900	875	850	825
USD/COP	4300	4400	4450	4500	4350	4200	4050	3900
USD/ZAR	19.5	19.0	18.5	18.0	17.9	17.8	17.7	17.6
USD/TRY	31.50	35.00	36.50	38.00	39.00	41.00	43.00	45.00
USD/ILS	4.10	4.00	3.90	3.90	3.85	3.81	3.76	3.71
EUR/PLN	4.50	4.40	4.30	4.20	4.15	4.10	4.05	4.01
EUR/CZK	25.0	24.5	24.0	23.5	24.2	24.9	25.6	26.3
EUR/HUF	390	395	400	400	395	384	376	367
DXY	111	110	109	107	106	104	103	102
Broad USD (Fed)	128	128	127	126	125	124	123	121

Source: Morgan Stanley Research. Click here for custom cross forecasts

Exhibit 175: Morgan Stanley foreign exchange Base, Bear, Bull scenarios

4Q24	Bear	Base	Bull
EURUSD	1.00	1.04	1.10
GBPUSD	1.10	1.15	1.22
USDJPY	132	140	146
AUDUSD	0.60	0.63	0.67
USDCNY	7.20	7.45	7.70
USDINR	79.2	82.5	85.8
USDZAR	17.3	18.0	18.4
USDBRL	4.80	5.30	5.80
USDMXN	18.50	19.25	20.50

Source: Morgan Stanley Research

Trade Ideas

Below you will find a list of our current trade ideas, entry levels, entry dates, rationales, and risks.

Interest Rate Strategy				
TRADE	**ENTRY LEVEL**	**ENTRY DATE**	**RATIONALE**	**RISKS**
Buy RXH4 136/137/138.5 broken call fly	6cts	26-Jan-24	The short positioning could make the market reaction asymmetric in case of downside surprises in core inflation. Nevertheless, the historical reaction in case of an overshooting, in addition to the Fed meeting, cannot be ignored at the current stage; hence, we prefer structures with limited downside risk.	Hawkish Fed and upside surprises in EA HICP prints. Risks are limited to the premium paid.
Rec 2y TONA OIS outright	21.875bp	26-Jan-24	The front-end already priced in roughly 25bp hike per year in the following 2years. We think such pricing is fair enough given that the BoJ plans to remove monetary easing at a measured pace. We expect this trade to have attractive carry + rolldown.	Reacceleration of Japan inflation and the market pricing in sharper rate hikes within the short period of time.
Long 5y UST	4.08%	19-Jan-24	The bumpy disinflation path has moderated following the release of December 2023 CPI and PCE, and the release of the new tenant repeat rent index could support a rally in duration. Tactically, this trade fades the narrative of rising Treasury supply going into the January TBAC meeting.	Markets retain a persistent inflation outlook.
Receive EUR 5y5y swap (vs. 6m) versus EUR 20y5y swap (vs. 6m)	-80bp	19-Jan-24	The recent flattening of 10s30s offers an attractive entry point for steepeners. The macro, historical analysis, and valuations all point to steeper curves.	A spike in equity volatility or sustained receiving flows in the 30y sector of the curve.
Pay April 2024 BoC	4.87%	19-Jan-24	We believe market pricing is attributing a too-high probability of a rate cut in April, as core and shelter inflation remains elevated. The BoC has signaled that it does not expect to cut rates before it sees sufficient evidence of a declining trend in underlying inflation.	A sharper slowdown in Canada's economic data and rapid decline in core inflation may lead the BoC to signal the start of the easing cycle.
Receive May '24 MPC	5.04%	17-Jan-24	We expect further disinflation ahead - with headline CPI possibly below 2%Y in April 2024. In the very short term, the February MPC should incorporate a meaningful downward revision to the inflation forecasts, making a strong case for a BoE's dovish pivot, which should support money markets' valuations.	The upcoming budget statement as well as a repricing in lower cuts expectations across the main central bank.
Long UKT 1T37 versus short UKT 1T57	+20.5bp	12-Jan-24	We believe that both fundamentals and technicals remain supportive for steepener trades over a medium-term horizon as the macro picture should confirm that further disinflation is ahead of us while curves should continue to steepen as we approach the start of the BoE's easing cycle. Additionally, the high-for-longer supply will likely to weigh on long-end gilts valuations as demand remains lackluster.	A significant issuance shift to the medium bucket; an acceleration of de-risking from LDI accounts and a sell-off on the back of a reacceleration in inflation, which might pressure the curve flatter.

Long 10s on 5s10s30s butterfly	-46bp	8-Dec-23	10s have sold off relative to the fly over the past month, and we maintain this relative value trade due to the cheapness in the 10s.	10s continue to sell off relative to the fly.
Sell 15 ASW	-49.2bp	8-Dec-23	As supply will likely remain higher for longer while the BoE is carrying out active QT sales, we see more scope for ASW to cheapen further. In addition, the next FY supply is expected to increase, with short and medium issuance likely to be higher.	A pickup in gilt demand, which could support richer ASW valuations, particularly over the short term.
Receive June 2025 BoC	3.57%	1-Dec-23	We continue to see more evidence that the Canadian economy is slowing, which eventually should translate into lower price pressures. Our economist expects that the BoC will be able to cut its policy rate to 3% by mid-2025, which is above market expectations.	Persistent core inflation and a rebound in economic activity could keep the BoC more restrictive for longer.
Short EU 3.25% 2034 on ASW	23bp	29-Nov-23	Issuance could weigh on 10y EU ASW. The seasonal tightening of OAT ASW should lead to a cheapening of 10y EU ASW as well.	Low EU target issuance for 1H24 and reduced expected issuance for Germany in 2024, which would support German ASW and possibly indirectly EU ASW.
Buy EU 0.7% 2051 versus EU 2.5% 2052	7bp	29-Nov-23	EU 2.5% 2052 is rich, with a z-score of -1.4 on the EU 51s52s53s fly. 51s52s price action diverged from GER 10s30s, following the flattening of 30s50s in OATs. We think this could correct.	A flattening of OAT 30s50s.
Short 30y JGB ASW	14.8bp	17-Nov-23	We think 30y TONA OIS trade cheap vs the fair value implied by 10y UST yield and BoJ's rate hike pricing, while 30y JGBs remain rich. In the event of a global duration rally, we see the cheapness of 30y OIS fading led by short-covering by the fast money community.	Higher UST yields can drive higher term premium in OIS.
New Zealand OIS 2s10s steepener	34bp	12-Nov-23	We expect the NZGB curve to bull steepen in 2024 as CPI inflation decelerates below the pace in Australia and growth continues to decelerate from the 2022 highs. Real retail sales may fall below their pre-Covid pace as high rates weigh on the economy, leading the RBNZ to signal removal of policy restrictions in 2024.	Substantial near-term fiscal stimulus from New Zealand's new governing coalition would likely warrant higher near-term yields, flattening the 2s10s curve.
Australia OIS 2s10s flattener	24bp	12-Nov-23	We expect front-end Australia yields to drift sideways through 1H24 as resilient inflation pressures lead the RBA to raise rates to 4.60%, and then keep rates on hold longer (i.e., cut later) than peer central banks. On a cross-market basis, this resilience in the front end of the Australian yield curve is likely to keep the 2s10s spread from widening significantly.	A pronounced decline in Australian inflation during early 2024.
Pay Apr 24 ECB	3.69%	3-Nov-23	We think that the bar for the ECB to cut as early as 1Q24 seems high, considering that the ECB may be willing to accept a period of stagnant (or even negative) growth in order to bring inflation closer to target.	A severe economic shock, leading the ECB to cut early into 1Q24.
Short BTP 4.40% May 33 versus Bund 1.7% Aug 32	180bp	3-Nov-23	After the recent repricing of the 10y spread, we think that the risk reward for the structural short 10y BTP versus Bund is attractive again.	A continuation of the rally on credit indices, which would support BTPs in the near term.

Long OAT Nov 32 yy ASW vs EUR 6m vs OAT May 53 yy ASW vs EUR 6m	78.5bp	11-Aug-23	The 10s30s OAT ASW has decoupled from the Bund ASW, and should benefit from the renewed issuance and Bund ASW widening move.	A major widening of the 10y OAT/Bund spread, which historically leads to a flatter 10s30s OAT as investors sell the OAT future.

Currency and Foreign Exchange

TRADE	ENTRY LEVEL	ENTRY DATE	RATIONALE	RISKS
Long EUR/GBP 2-week calls	0.21%	23-Jan-24	Markets may be underpricing the risk of a dovish pivot from the February BoE meeting.	The BoE actively pushes back on market pricing for cuts, bolstering GBP or the budget, could reduce the urgency to cut.
Long NOK/SEK	0.99	9-Jan-24	Slowing Norges Bank FX purchases and the approaching end of the Riksbank's FX-hedging programme should reduce NOK-negative and SEK-positive market flows, while we expect the Riksbank to cut rates sooner than Norges Bank.	Increased FX hedging by the Riksbank or a dovish pivot by the Norges Bank could weigh on the pair.
Short EUR/JPY	156.1	4-Jan-24	Falling US rates should weigh on USD/JPY, while EUR/USD may remain under (modest) pressure amid weak European economic data.	A rebound in both US and global data, generating a rates-higher, risk-on environment, which pushes both EUR/USD and USD/JPY higher simultaneously.
Short GBP/NOK	13.589	12-Nov-23	BoE dovishness should contrast with a relatively hawkish Norges Bank, while slowing Norges Bank FX purchases should reduce downward pressure on NOK.	Norwegian data slow markedly, leading to significant Norges Bank rate cuts.
Long 1y USD/CHF 10-delta strangle (0.7775 put, 0.9550 call)	0.92%	3-Nov-23	Despite heightened geopolitical tensions and an inflationary cycle attempting to come to an end, implied volatility in CHF (a safe-haven asset) remains subdued both relative to itself (historically) and safe-haven peers. With the spectrum of probable outcomes already broad and arguably broadening further, the future is less certain rather than more certain. Hence, we take advantage of the low implied volatility, particularly low implied tail volatility (as proxied by 10-delta butterfly spreads) and go long a 1y 10-delta strangle.	Geopolitical conflicts are resolved in an orderly fashion and the global inflationary cycle comes to an orderly end, thus materializing low volatility.

Inflation- Linked Bonds

TRADE	ENTRY LEVEL	ENTRY DATE	RATIONALE	RISKS
Long Feb44 iota	11bp	27-Apr-23	The Feb44 iota should widen amid (1) uncertainty in the financial system, and (2) increased cut pricing.	The primary risks to this trade are (1) the fading of rate cuts priced in 2023, and (2) strong signs that banking stress is in the rearview mirror.
Long OATei31	0.35%	10-Mar-23	Livret A hedging flows should support lower real yields across the OATei term structure and especially the sub 10-year sector. We believe demand for real yield paper will overshadow any issuance or risk-off sentiment.	A pickup in deflation fears that would reduce hedging needs.

Buy IL28	-0.73%	18-Nov-22	Growth is likely to slow with fears of a recession becoming more prominent, and weaker growth usually leads to demand for FI assets. With inflation not falling significantly, we suspect that momentum will swing from recession into stagflation mode. Furthermore, we envision a gradual shift from the BoE to the dovish end of the spectrum.	A more hawkish BoE that will ultimately push real yields higher.

Short -Duration Strategy				
TRADE	**ENTRY LEVEL**	**ENTRY DATE**	**RATIONALE**	**RISKS**
Short 2y SOFR swap spread	-12.3bp	2-Feb-24	After stabilizing post-year end, we expect funding conditions to tightening in the coming months. This will likely be driven by more UST supply, higher demand for repo financing, greater bank liquidity needs, and a sustained decline in the RRP.	Fed expedites the taper timeline, and/or the data allows the Fed to remain on hold, pushing further out the market-implied timing of cuts.
SOFR/TONA basis 1y 4s9s flattener	-5bp	8-Jun-23	Aiming to get the attractive carry with hedging the risk of USD funding concern led by US hard landing scenario.	The main risk to this trade is a significant rally in USD/JPY necessitating mark-to-market principal adjustments and thereby causing Japanese investors to build new XCCY basis receiving positions in the short- to medium-term zone to maintain their initial USD principal.

Exhibit 176: History of recommendations

Long OAT Nov 32 yy ASW versus EUR 6m versus OAT May 53 yy ASW versus EUR 6m

Instrument	Maturity	Trade	Entry Date	Entry Level	Exit Date	Exit Level	Target/ Objective	Stop/Re-assess	Size of Trade or Unit/Notional	CUSIP/ISIN/ BLOOMBERG
SPGB 1.9 10/31/52	31-Oct-52	10s30s flatteners in Spain vs France	02-Dec-22	3.23	24-Feb-23	3.95				ES0000012K46
SPGB 2.55 10/31/32	31-Oct-32	10s30s flatteners in Spain vs France	02-Dec-22	2.84	24-Feb-23	3.5				ES0000012K61
FRTR 2 11/25/32	25-Nov-32	10s30s flatteners in Spain vs France	02-Dec-22	2.29	24-Feb-23	3.01				FR001400BKZ3
FRTR 0 ¾ 05/25/52	25-May-52	10s30s flatteners in Spain vs France	02-Dec-22	2.44	24-Feb-23	3.23				FR0013480613
FRTR 2 11/25/32	25-Nov-23	Buy OAT 2% Nov 32 vs Bund Aug 1.7% 32	03-Feb-23	2.64	27-Sep-23	3.3	35bp			FR001400BKZ3
DBR 1.7 08/15/32	15-Aug-32	Buy OAT 2% Nov 32 vs Bund Aug 1.7% 32	03-Feb-23	2.16	27-Sep-23	2.73	35bp			DE0001102606

Sell BTP 4.4% May 2033 versus Buy DBR 1.7% Aug 2032

Instrument	Maturity	Trade	Entry Date	Entry Level	Exit Date	Exit Level	Target/ Objective	Stop/Re-assess	Size of Trade or Unit/Notional	CUSIP/ISIN/ BLOOMBERG
FRTR 2 11/25/32	25-Nov-23	Buy OAT 2% Nov 32 vs Bund Aug 1.7% 32	03-Feb-23	2.64	27-Sep-23	3.3	35bp			FR001400BKZ3
DBR 1.7 08/15/32	15-Aug-32	Buy OAT 2% Nov 32 vs Bund Aug 1.7% 32	03-Feb-23	2.16	27-Sep-23	2.73	35bp			DE0001102606
DBR 1.7 08/15/32 Corp	15-Aug-23	Sell BTP 4.4% May 2033 vs buy DBR 1.7% Aug 2032	04-Aug-23	2.51	29-Sep-23	2.774		153.0		DE0001102606
BTPS 4.4 05/01/33 Corp	1-May-33	Sell BTP 4.4% May 2033 vs buy DBR 1.7% Aug 2032	04-Aug-23	4.15	29-Sep-23	4.691		153.0		IT0005518128

Pay Apr 24 ECB

Instrument	Maturity	Trade	Entry Date	Entry Level	Exit Date	Exit Level	Target/ Objective	Stop/Re-assess	Size of Trade or Unit/Notional	CUSIP/ISIN/ BLOOMBERG
EUR ECB Dated ESTR OIS - April meeting	17-Apr-24	ECB Jan 24/Apr 24 calendar spread steepeners	03-Nov-23	3.69						EZ0BFR APR2024 Index
EUR ECB Dated ESTR OIS - January meeting	31-Jan-24	ECB Jan 24/Apr 24 calendar spread steepeners	03-Nov-23	3.90	17-Jan-24	3.9				EZ0BFR JAN2024 Index

Receive May'24 MPC

Instrument	Maturity	Trade	Entry Date	Entry Level	Exit Date	Exit Level	Target/ Objective	Stop/Re-assess	Size of Trade or Unit/Notional	CUSIP/ISIN/ BLOOMBERG
Mar'23 MPC	23-Mar-23	Rec Jun'23 vs Mar'23 MPC	24-Feb-23	34.4bp	14-Mar-23	7.8	0bp	52bp		GPSF1A Curncy
Jun'23 MPC	22-Jun-23	Rec Jun'23 vs Mar'23 MPC	24-Feb-23	34.4bp	14-Mar-23	7.8	0bp	52bp		GPSF3A Curncy
GBP OIS (BOE FWD)	22-Jun-23	Rec Jun'23-Aug'23 MPC Spread	28-Apr-23	16.9bp	24-May-23	30bp	0bp	25bp		GPSF2A Curncy
GPSF3A:MPC OIS	3-Aug-23	Rec Jun'23-Aug'23 MPC Spread	28-Apr-23	16.9bp	24-May-23	30bp	0bp	25bp		GPSF3A Curncy
Sep'23 MPC	21-Sep-23	Rec Sep'23 MPC Outright	24-May-23	5.28%	22-Jun-23	5.69%	4.85%	5.75%		GPSF3A Curncy
GPSF5A: MPC OIS	21-Mar-24	Rec. Dec'23-Mar'24 MPC	18-Aug-23	11bp	08-Sep-23	0.3bp	0bp	18bp		GPSF5A BGN Curncy
GPSF3A:MPC OIS	14-Dec-23	Rec. Dec'23-Mar'24 MPC	18-Aug-23	11bp	08-Sep-23	0.3bp	0bp	18bp		GPSF3A BGN Curncy

Receive EUR 5y5y Swap (vs. 6m) versus EUR 20y5y Swap (vs. 6m)

Instrument	Maturity	Trade	Entry Date	Entry Level	Exit Date	Exit Level	Target/ Objective	Stop/Re-assess	Size of Trade or Unit/Notional	CUSIP/ISIN/ BLOOMBERG
EUSA0505 Curncy	24-Oct-27	Receive EUR 5y5y	25-Oct-22	3.32	10-Mar-23	2.88				EUSA0505 Curncy
EUSA0505 Curncy	5y	Receive EUR 5y5y Swap	13-Nov-22	0.03	05-Apr-23	2.81				EUSA0505 Curncy
EUR FORWARD SWAP 5Y5Y	1-Dec-33	Pay EUR 5y5y swap	01-Dec-23	2.97	12-Jan-24	2.65	3.3/3.35			EUSA0505 Curncy

Buy Broken Call Fly on RX (136/137/138.5)

Instrument	Maturity	Trade	Entry Date	Entry Level	Exit Date	Exit Level	Target/ Objective	Stop/Re-assess	Size of Trade or Unit/Notional	CUSIP/ISIN/ BLOOMBERG
RX	26-Jan-24	Buy Put Spread on RX (130.5/129)	01-Dec-23	70.00	12-Jan-24	1.4				RXH4 Comdty
RX	26-Jan-24	Buy Put Spread on RX (130.5/129)	01-Dec-23	40.00	12-Jan-24	0.7				RXH4 Comdty

Source: Morgan Stanley Research

Definition of terms

Buy/Long: The analyst expects the total or excess return (depending on the nature of the recommendation) of the instrument or issuer that is the subject of the investment recommendation to be positive over the relevant time period.

Sell/Short: The analyst expects the total or excess return (depending on the nature of the

recommendation) of the instrument or issuer that is the subject of the investment recommendation to be negative over the relevant time period.

Selling protection or Buying Risk: The analyst expects that the price of protection against the event occurring will decrease over the relevant time period.

Buying protection or Selling Risk: The analyst expects the price of protection against the event occurring will increase over the relevant time period.

Pay: The analyst expects that over the specified time period the variable rate underlying the swap agreement that is the subject of the investment recommendation will increase.

Receive: The analyst expects that over the specified time period the variable rate underlying the swap agreement that is the subject of the investment recommendation will decrease.

Unless otherwise specified, the time frame for recommendations included in the Morgan Stanley Fixed Income Research reports is 1 - 3 months and the price of financial instruments mentioned in the recommendation is as at the date and time of publication of the recommendation.

When more than one issuer or instrument is included in a recommendation, analyst expects one part of the trade to outperform the other trade or combination of other trades included in the recommendation on a relative basis.

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Government Bond Ratings

Exhibit 177: Government Bond Ratings

no		Aaa/ AAA	Aa1/ AA+	Aa2/ AA	Aa3/ AA-	A1/ A+	A2/ A	A3/ A-	Baa1/ BBB+	Baa2/ BBB	Baa3/ BBB-	Ba1/ BB+	Ba2/ BB	Ba3/ BB-	B1/ B+	B2/ B	B3/ B-	Below B3/ B-
US	Moody	STA																
	S&P		STA															
	Fitch	STA																
JPN	Moody					STA												
	S&P					STA												
	Fitch						STA											
UK	Moody				STA													
	S&P			NEG														
	Fitch				STA													
GER	Moody	STA																
	S&P	STA																
	Fitch	STA																
FRA	Moody			STA														
	S&P			STA														
	Fitch			NEG														
AUT	Moody		STA															
	S&P		STA															
	Fitch		STA															
NETH	Moody	STA																
	S&P	STA																
	Fitch	STA																
FIN	Moody		STA															
	S&P		STA															
	Fitch		STA															
BEL	Moody				STA													
	S&P			STA														
	Fitch				STA													
SPA	Moody								STA									
	S&P							POS										
	Fitch							STA										
ITA	Moody										STA							
	S&P									NEG								
	Fitch										STA							
IRE	Moody						POS											
	S&P				STA													
	Fitch					STA												
POR	Moody									STA								
	S&P										STA							
	Fitch									STA								
GRE	Moody													STA				
	S&P												POS					
	Fitch												STA					
Australia	Moody	STA																
	S&P	STA																
	Fitch	STA																
New Zealand	Moody	STA																
	S&P		POS															
	Fitch		STA															
Canada	Moody	STA																
	S&P	STA																
	Fitch	STA																

Source: Morgan Stanley Research, Moody's, Standard and Poor, Fitch
STA: Outlook Stable, NEG: Outlook Negative, DEV: Outlook Developing, OW-: On Watch Negative, POS: Outlook Positive, SD: Selective Default

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(as of January 31, 2024)

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	Coverage Universe		Investment Banking Clients (IBC)			Other Material Investment Services Clients (MISC)	
Stock Rating Category	Count	% of Total	Count	% of Total IBC	% of Rating Category	Count	% of Total Other MISC
Overweight/Buy	1423	38%	284	42%	20%	621	39%
Equal-weight/Hold	1692	45%	322	48%	19%	720	46%
Not-Rated/Hold	3	0%	0	0%	0%	1	0%
Underweight/Sell	630	17%	70	10%	11%	236	15%
Total	3,748		676			1578	

Data include common stock and ADRs currently assigned ratings. Investment Banking Clients are companies from whom Morgan Stanley received investment banking compensation in the last 12 months. Due to rounding off of decimals, the percentages provided in the "% of total" column may not add up to exactly 100 percent.

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