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IDEA

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## Global Macro Strategist | Global

# 'Bad Is Good' Is Back

The July FOMC meeting and a technical US recession eased financial conditions. It may be only a matter of time before this easing shows up in stronger macroeconomic data. For now, bad growth data is good for risky markets, i.e., "bad is good." At some point, though, "good" might be "bad" again.

### Global Macro Strategy

We discuss how the Fed's reference to the June dot-plot ushered in the return of 'bad is good' and that the subsequent easing of financial conditions may result in its inverse. We make the case to use further USD weakness to re-establish USD longs, particularly in EUR/USD.

### Interest Rate Strategy

In US rates, we stay neutral on duration and curve, but maintain 1y1y CPI swaps. We keep our EUR 10y10y swap (pay), our long EUR 5y5y inflation swap, and our Sept 149/147/146 Bund broken put fly. We keep our tactical EUR 10s30s swap paying trade. On core/semi-core ASW, we are neutral at current levels – we closed our last long trade last week. We prefer closing the BTP 5s10s tactical flatteners and the short 5y Bono vs OBL. We keep the short 30y BTP vs. OAT. We keep the long June 23 FRA/€STR basis. We maintain our long real yield position in IL31. We stay received Sep'22 MPC and long front-end RPI. We still find 15-20y sector gilts very cheap vs. 10y and 30y. We close our received TONA OIS 1y1y position, maintain a JGB 10s20s steepener, and shift TONA OIS 10s20s steepener to 5s20s steepener.

### Currency & Foreign Exchange

Stay long USD as investors are underestimating the stickiness of inflation, the Fed's resolve in combating it, and the level of tightening needed to achieve it. We stay neutral on GBP heading into the BoE decision, but think GBP should continue to outperform against EUR. Stay long CHF/NOK and short EUR/USD and AUD/CAD.

### Inflation-Linked Bonds

In the US, we continue to recommend buying 1y1y CPI swaps (or long July '24 TIPS BE vs. short July '23 TIPS BE). We explore the path for shelter inflation ahead. We preview the upcoming JGBi auction, and discuss why the current JGBi BEI looks cheap vs. fundamentals.

### Short-Duration Strategy

Investors have preferred 1m T-bills over 3m in periods of high volatility during the current hiking cycle. Now that the July FOMC is behind us, we explore what this could mean for T-bill demand over the coming weeks.


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# Global Macro Strategy

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## Blame The June Dot-Plot For The July FOMC Meeting

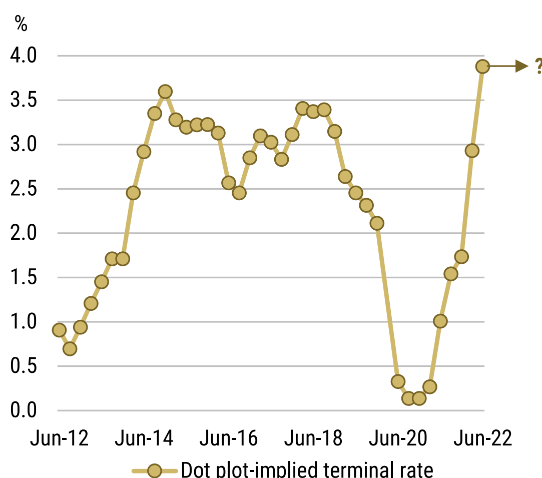
The Fed wasn't supposed to deliver a dot-plot at the July FOMC meeting. But it did when Chair Powell said, "So where are we going with this? I think the best—I think the committee, broadly, feels that we need to get policy to—at least to a moderately restrictive level, and maybe the best data point for that would be what we wrote down in our SEP at the June meeting."

The FOMC statement and Powell himself acknowledged weaker growth, which struck a dovish tone, to be sure. But we think Powell's suggestion that June's dot-plot still applied – even after much stronger realized inflation data during the intermeeting period – invoked the strongest perception of a "dovish pivot."

The dot plot-implied terminal rate – shown in Exhibit 1 – has increased at each quarterly meeting since December 2020. Powell suggested that the terminal rate hasn't yet increased again (even though it may in September). With the terminal rate stagnant, Powell's guidance on a slower pace of rate hikes carried more weight.

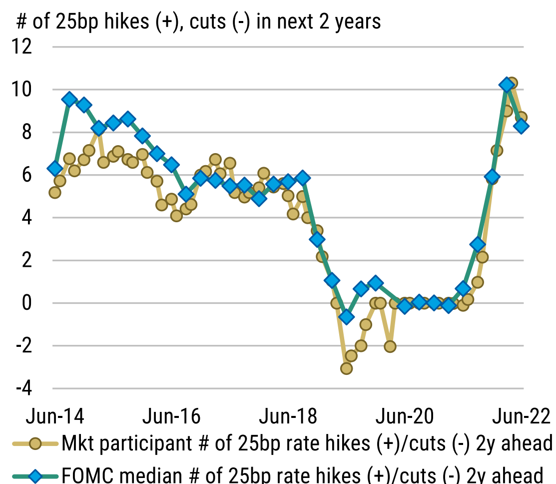
Investors take the dot-plot seriously, and lean on it to form their own expectations for Fed policy. Exhibit 2 shows how closely investors align their expectations for rate hikes with the median FOMC participant. Forward guidance is strong with the dot-plot.

**Exhibit 1:** Federal Reserve dot plot-implied terminal midpoint for the target fed fund rate range




Source: Morgan Stanley Research, Federal Reserve
Note: each dot represents the maximum median midpoint for the target fed fund rate range across all years.

**Exhibit 2:** Federal Reserve dot plot-implied # of 25bp moves 2 years ahead vs. market participant expectations



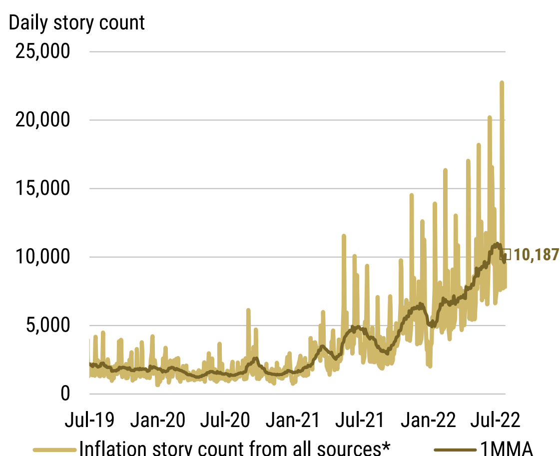

Source: Morgan Stanley Research, Federal Reserve, FRB New York

So, the June dot-plot still applies, despite continued inflation upside. Why? In our view, the weakening in growth data gave the Fed more confidence that its policy is working as intended. Powell laid out the framework clearly in the Q&A session: "the way this works is we set our policy and financial conditions react, and then financial conditions are what affects the economy."

Indeed, his prepared remarks confirmed that's the FOMC's view of what happened: "Recent indicators of spending and production have softened. Growth in consumer spending has slowed significantly, in part reflecting lower real disposable income and tighter financial conditions."

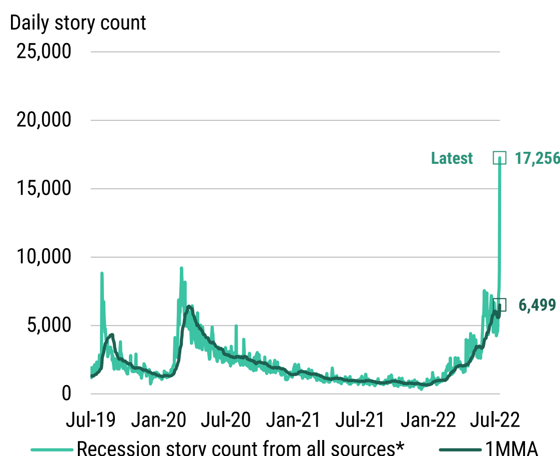
The subsequent GDP report – see 2Q GDP: Technical Recession Confirmed – prompted news media to write more about recession than inflation for the first time since early 2020 (see Exhibit 3 and Exhibit 4). On July 28, the news media published >17 thousand stories on recession vs. ~13 thousand stories on inflation.

**Exhibit 3:** Daily story count for the topic "inflation" from Bloomberg, social media, and news sources




Source: Morgan Stanley Research, Bloomberg NT <GO>

**Exhibit 4:** Daily story count for the topic "recession" from Bloomberg, social media, and news sources



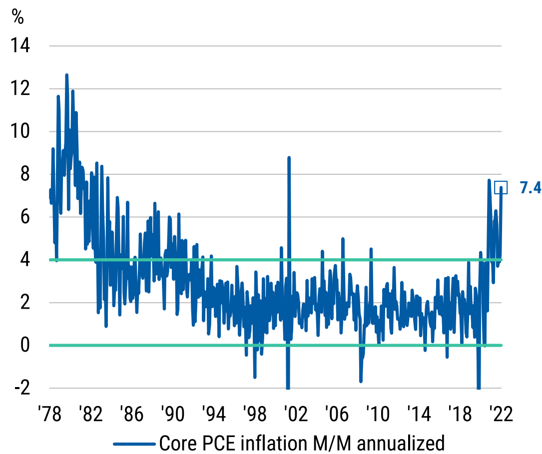

Source: Morgan Stanley Research, Bloomberg NT <GO>

News media attention on inflation has declined more recently, and may fall further if headline CPI inflation Y/Y falls into year-end. Indeed, Powell acknowledged this point by saying, "...the public really reads about CPI. And the difference really is because the CPI has higher weights on things like food, gasoline, motor vehicles, and housing than the PCE index does..."

Nevertheless, Powell also began to shift focus toward PCE inflation, "You know, we're – given the importance in the public eye of CPI, we are calling it out and noticing it, and everything like that, but remember, we do target PCE, that is because we think it's a better measure." And that "better measure" went up – a lot – in June.

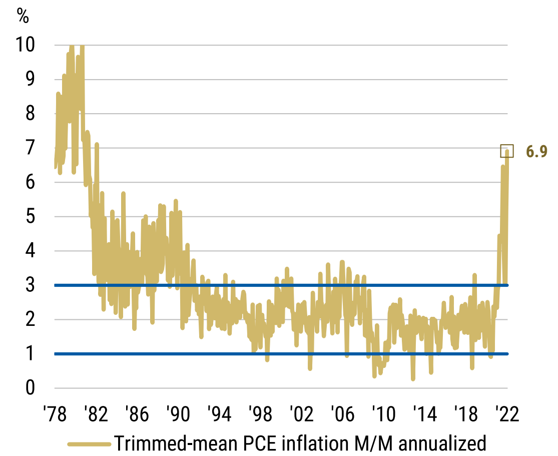
On both core and trimmed-mean measures, PCE inflation rose dramatically in June. Core PCE prices increased the second most since the pandemic began, and trimmed-mean PCE prices rose the most since 1982, both on a M/M basis. Given this backdrop, we question whether softer growth alone should make the Fed more confident that moderately restrictive policy will suffice to bring inflation back to target.

**Exhibit 5:** US core PCE inflation, M/M annualized




Source: Morgan Stanley Research, BEA

**Exhibit 6:** US trimmed-mean PCE inflation, M/M annualized



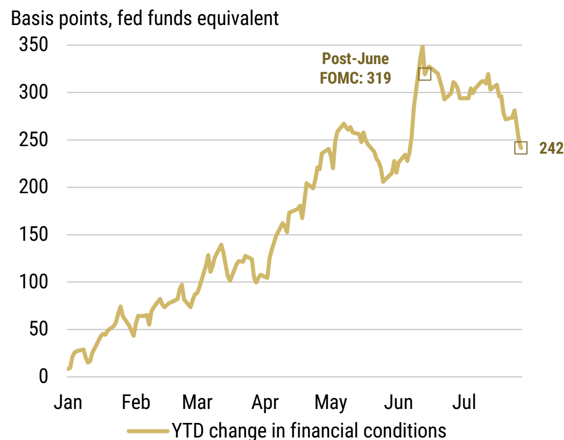

Source: Morgan Stanley Research, FRB Dallas

And even if the Fed is right to be more confident, we question whether it should have made that confidence known to investors so soon. The effect of the July FOMC meeting on financial conditions validates our concern. Our economists' measure of US financial conditions eased by 40bp (fed fund equivalents) around the July FOMC meeting.

Financial conditions have now eased over 100bp since just before the June 2022 FOMC meeting (see Exhibit 7). Looking at the 3-day window from the market close before the FOMC meeting to the Friday after, financial conditions eased the most around the meeting this month (see Exhibit 8).

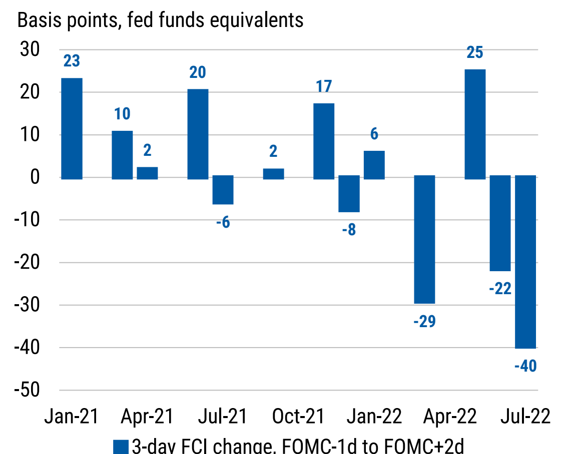
More financial conditions easing might be on the way if growth data continue to disappoint. But disappointing data may only last so long. It may be only a matter of time before the financial conditions easing since mid-June shows up in stronger macroeconomic data. For now, bad growth data is good for risky markets, i.e., "bad is good." At some point, though, "good" might be "bad" again.

**Exhibit 7:** Change in US financial conditions in 2022 YTD




Source: Morgan Stanley Research, Federal Reserve

**Exhibit 8:** 3-day change in US financial conditions around FOMC meetings




Source: Morgan Stanley Research, Federal Reserve

## Stay Long USD, Don't Get Complacent

Tennis coaches are known to say, "use your changeovers wisely." Use the respite to re-focus, strategize, and prepare for what comes next. Don't just sit and wait; prepare. See more here: USD | Use your changeovers wisely

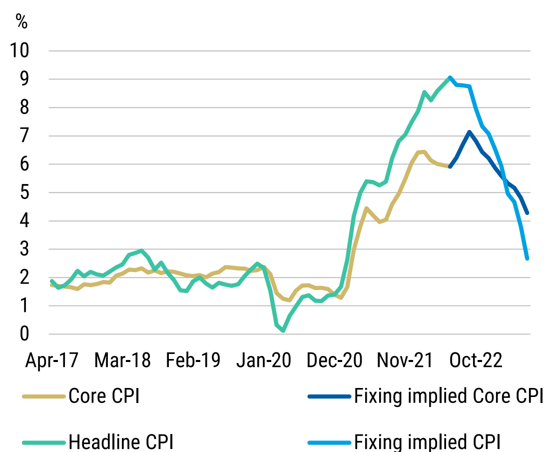
The USD seems to be having its own "changeover" moment, with the DXY reaching a multi-week low in the wake of the FOMC's modestly dovish tone and soft GDP. We caution against complacency, though; **the market is underestimating inflation and the Fed's resolve to tackle it, in our view. We thus recommend using this "changeover" of USD weakness to re-establish USD longs, particularly in EUR/USD, rather than getting complacent.**

We have previously highlighted two necessary conditions that need to be met before the USD can peak and turn lower: Fed pricing has to peak, and global growth expectations have to bottom. Neither seems likely to be met anytime soon.

On inflation, not only is it likely that core CPI continues to rise as seen in CPI fixing markets (Exhibit 9), but the inflation components rising most are those most sensitive to the labor market (Phillips curve). This means the Fed has a lot more work to do; the SF Fed estimates short-term NAIRU of 6%, 240bp above the current level. Generating such labor market loosening requires either more labor supply (higher wages) or less labor demand (slower growth), or both.

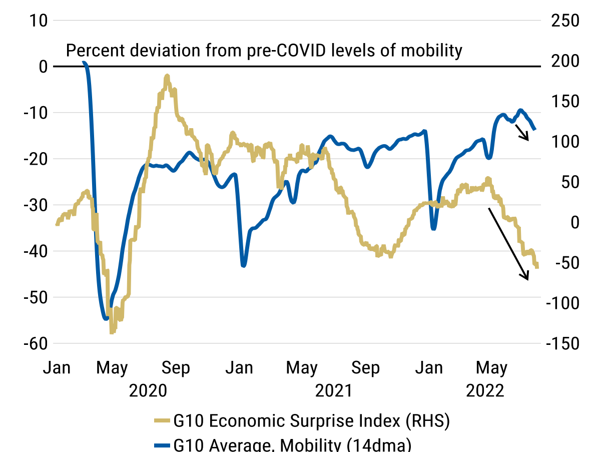
Because short-term labor supply is likely stickier than usual, given post-COVID lifestyle changes[1], rectifying the labor demand/supply imbalance may require either a significant crimping in labor demand, much higher wages than usual, or both. Either of these outcomes suggest Fed hawkishness compared to market pricing which implies fed funds at end-2023 100bp below the June SEP 'dot'.

**Exhibit 9:** CPI fixing markets imply that headline CPI will stay elevated while core CPI may accelerate further to 7.1% by September




Source: Bloomberg, Morgan Stanley Research

**Exhibit 10:** Mobility and data surprise indicators suggest growth weakness will continue




Source: Google, Macrobond, Morgan Stanley Research

Meanwhile growth expectations continue to falter. Incoming data for the most part continue to underwhelm and the combination of monetary tightening, negative real income growth, and simultaneous consumer and producer pessimism suggest this trend is unlikely to break in the near term. Indeed near-term indicators continue to soften, with the G10 economic surprise index at nearly a 10-year low (excluding March 2020) and mobility metrics still well below 2019 levels and even turning lower (Exhibit 10).

**Trade idea: Maintain short EUR/USD at 1.0161 with a target of 0.97 and stop of 1.05**

We maintain a bullish view on the USD, particularly versus the EUR, and continue recommending EUR/USD shorts targeting 0.97 with a 1.05 stop. EUR is the currency most likely to weaken versus the USD in the short term, in our view. Markets could be viewing this "changeover" as a respite for risk assets, limiting USD weakness versus risk-sensitive currencies.

Lower US bond yields in response to market optimism (albeit misplaced) about a Fed dovish pivot may limit USD/JPY's rise. But continued headwinds to local growth in Europe are likely to keep EUR under pressure, both versus the USD and perhaps on crosses too (e.g., EUR/GBP).

This respite – this changeover – should be used as a chance to re-enter USD longs, though, we believe. As my tennis coach said, focus on the games ahead, not the games you just played.

## Our Current Stance On Markets

In global rates markets, we recommend long July '24 TIPS BE vs. short July '23 TIPS BE. We maintain long 1y1y ZCIS. We continue to suggest selling 3m10y ATM SOFR straddles and buying +/-50bp OTM SOFR strangles as a way to play the range. In addition, we continue to recommend 2y2s30s curve floor spreads struck ATMF/ATMF-75bp, and 6m5s30s conditional bull-steepeners as a cheap hedge to our delta view.

In the euro area, we close our tactical BTP 5s10s flatteners, and our short 5y Bono vs. OBL. We maintain our long Sept. 149/147/146 Bund broken put fly, and a tactical EUR 10s30s swap steepener. We maintain pay 5y EUR 2s5s10s fly and our OATei24 BE. We maintain our conditional Bund ASW widener. We continue to recommend long June 23 FRA/€STR positions, short 30y BTP vs. OAT, and keep our short duration through the EUR 10y10y paying trade and the long EUR 5y5y inflation swap. In the UK, maintain long UKT 1E 39 vs. UKT 0H 61, and a long 1E 39 vs. 4Q 32 and 1Q 51. We keep buying IL31, and rec Sep'22 SONIA MPC meeting.

In Japan, close receive 1y1y TONA OIS. We change our TONA OIS 10s20s steepener to 5s20s steepener. We maintain JGB 10s20s steepeners (DV01 2:1), TONA/SOFR basis 2s10s20s fly, long 20y JGB ASW vs. ESTR compound, and ZTIBOR-OIS 5s20s flattener.

In dollar bloc, we maintain short BAZ2. We continue to favor NZ 1y5y OIS flatteners.

In foreign exchange markets, we maintain short EUR/USD (target 0.970, stop 1.05) and long CHF/NOK (target 11.00, stop 9.8). We maintain short AUD/CAD (target 0.84, stop 0.90). In FX options, we maintain long 3m USD/JPY seagulls (initially priced 25-Apr-22 0.69%).

# Interest Rate Strategy

**United States**
The July FOMC meeting came across as dovish relative to the hawkish expectations. A few dovish elements we noticed: (1) the Fed sees the current ~2.25% rate as neutral; (2) the Fed has an unrealistically high bar to hike above 75bp, and is looking to lower the pace of hikes instead, despite the highest inflation in 40 years that is yet to conclusively peak; and (3) the Fed is no longer focused only on getting inflation down like in recent meetings, and is watching growth risks, too. Ultimately, the Fed thinks "moderately restrictive" policy is enough to quell the highest inflation in 40 years.

Is another hawkish re-pivot possible? Yes. We think markets should not rule out another hawkish pivot in the weeks and months ahead. Consider the following short-term risks: (1) CPI fixings suggest a plateau, not peak: Headline inflation could be very close to 9% through mid-October; (2) our economists see upside risks for a 75bp hike in September; (3) our core CPI fixing estimates suggest 0.5-0.6% core CPI in the next three months – way above Waller's comfort level around 0.3%; and (4) economic surprise indices are poised to surprise to the upside.

Even in the medium term, there are upside risks to remember: (1) the CPI may be sticky at lower levels: the journey from 9% to 5% CPI might be easier than the journey from 5% to 2%; (2) a SF Fed paper argues that NAIRU is ~6% , suggesting we have the hottest labor market in forty years – which could make it challenging for inflation to come down; and (3) 5y-10y UMich Inflation expectations could move up higher – in line with the index of common inflation expectations.

For now, with the marginal tilt of the Fed toward growth, we suggest trading neutral on duration and curve, until either (i) inflation becomes the primary concern in Fedspeak even with discounting growth, or (ii) growth concerns alleviate, and inflation automatically becomes the primary concern for monetary policy. We suggest long 1y1y CPI swaps as a way to play for upside inflation risks, a relatively dovish Fed, and attractive entry levels.

Ahead of the Treasury refunding meeting next week, in our base case, we expect the Treasury to continue $1bn cuts per month in the 2y, 3y, and 5y auction sizes as well as continue $1bn cuts in the 10y and 30y for both new issue and re-openings. We expect the Treasury to continue $2bn cuts per month for the 7y and announce $4bn cuts for both 20y new issue. We also explore why a Treasury buyback program could be a useful feature of debt management at a time when deficits are shrinking and bill supply is low relative to demand.

**Euro area**The 10y Bund fell below 1%, going back to a level of dislocation versus our long-term model observed only four times since 2015. The last leg of the rally has occurred, with a move higher on short-dated inflation swap. This decoupling is unsustainable, in our view, and net long positioning has increased further post the ECB meeting making the market more prone to trading in a range around 1%, before any resumption of the bear market. We keep our EUR 10y10y swap (pay), our long EUR 5y5y inflation swap and our Sept 149/147/146 Bund broken put fly.

On the swap curve, the 30y to 50y is too rich, the 10s30s slope has started to normalise. We keep our tactical EUR 10s30s swap paying trade. On core/semi-core ASW, we are neutral at current levels - we closed our last long trade last week.

On non-core EGBs, although we do not see demand for BTPs from real money and non-residents, 5y to 10y BTPs look cheap versus credit or Bonos. We prefer to close the BTP 5s10s tactical flatteners and the short 5y Bono vs OBL. We keep the short 30y BTP vs OAT. We keep the long June 23 FRA/€STR basis.

**United Kingdom**

The rally across fixed income assets has also been reflected across yields. While we have been neutral duration, it is 10y real yields that have led the rally, and this is a high conviction view that we want to run into the upcoming BoE meeting. Once the meeting is done, in our base case the market will have to juggle between softer economic fundamentals and the potential for more gilt issuance.

Inflation stickiness will be a key topic of discussion. We find abundant complacency when it comes to RPI forwards as the market prices in a rapid normalisation. So far our 5y RPI position has largely benefitted from the rise in 1y RPI swaps. We expect the next leg of support to emanate from the forwards.

In terms of ASWs, we resist the temptation to sell them. Earlier in the week, we closed our long ASW in UKT 0H 61. The excessive amount of vol and range-bound behaviour are not conducive to a trade theme in either direction. We expect this to continue until we actually witness meaningful selling of gilts.

**Japan**

We see further short-covering in the belly of the curve. With the BoJ sticking well and truly to its easing policy to stimulate demand-driven inflation, and the Fed adopting a somewhat dovish tone in response to weak economic data, we currently see little justification for shorting duration through the belly of the curve in at least the near term, and believe that long-duration strategies might end up being supported by the usual "summer rally".

We suggest closing our receive 1y1y TONA OIS position, as the curve has now priced out the most of near-term rate hike pricing. We maintain our JGB 10s20s steepener, but shift our TONA OIS 10s20s steepener to a 5s20s steepener.

# United States | To soon for a dovish pivot?

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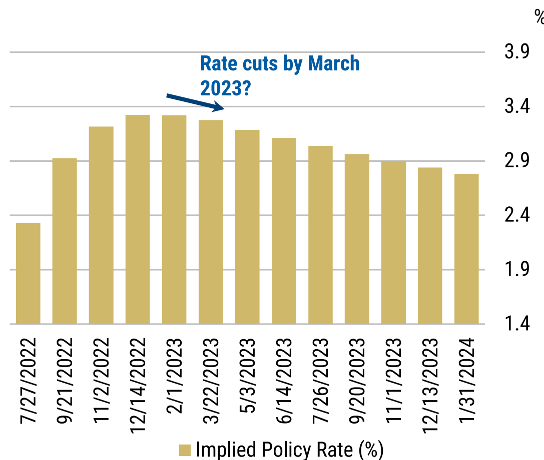
| | Duration | Curve | Inflation |
|---|---|---|---|
| **VIEW** | **NEUTRAL** | **NEUTRAL** | **BULLISH SHORT TERM INFLATION** |
| Remarks | Fed marginally tilting to a growth focus, offset by continued inflation risks | The Fed's stance is on neither extremes | Markets underestimate inflation; dovish Fed; good entry level |
| Trades | -- | -- | Long 1y1y CPI swaps |

**Reaction to the July FOMC meeting:** At the July FOMC meeting, the Fed acknowledged the ailment, aka high inflation. The Fed acknowledged that it needs more medicine, aka restrictive monetary policy, and is about to deliver it, in line with the treatment plan written in June (June dot pot).

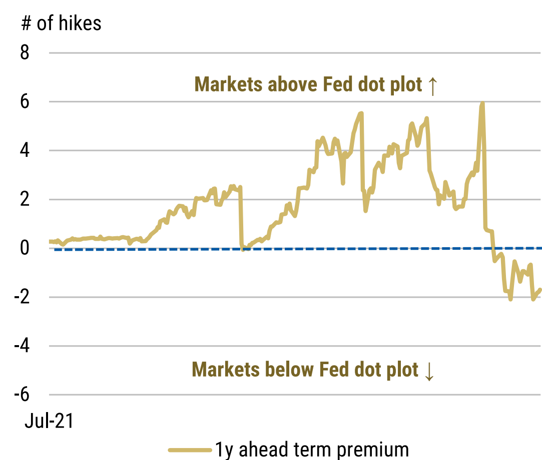
But most importantly – even though the ailment looked worse in May and June (CPI prints) – the Fed is looking to lower the dosage (pace of hikes) in the coming months. The Fed sounds confident that the current treatment plan (the dot plot) is enough and is already lowering the temperature (aka growth) (see gray box below). While in theory, the Fed can be nimble about a 50bp or 75bp hike in September, it does not seem very nimble about the final destination, the terminal rate, which seems to be around 3.50% in the coming months.

**Exhibit 11:** Market implied policy path in the next 18 months




Source: Bloomberg, Morgan Stanley Research

**Exhibit 12:** 1y ahead market expectations vs. Fed's dot plot




Source: Bloomberg, Morgan Stanley Research

We think **it is remarkable (and a dovish surprise) that the Fed thinks that "moderately restrictive" policy, reached with a shallower pace of hikes, will be enough to quell the highest inflation in 40 years, and even more remarkable, when you consider that the latest two CPI prints were clearly the strongest CPI prints in at least 40 years** (see Exhibit 14).

The increasing attention to growth concerns and the relative rigidity of the policy path amid upside inflation surprises mark a dovish Fed pivot relative to the buildup of hawkish expectations, at the July FOMC meeting.

***Powell on satisfaction with growth slowdown and loosening of labor markets:*** *Are we seeing the slowdown in economic activity that we think we need? And there is some evidence we are, at this time.....But the slowdown in the second quarter is notable. We'll be watching that.*

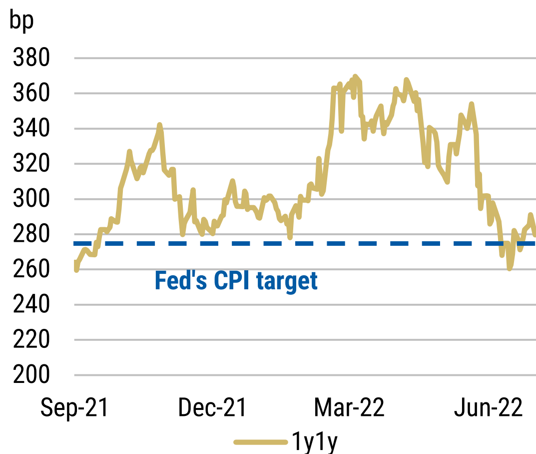
*There's a feeling that the labor market is moving back into balance.*

***Powell on the level of restriction:*** *I think the committee broadly feels, we need to get policy to a moderately restrictive level....Maybe the best data point is what we wrote down at the June meeting. The median would have been between 3.25 and 3.50.*

***Powell on future pace of hikes:*** *As the stance of monetary policy tightens further, it'll become appropriate to slow the pace of increases while we assess how cumulative policy adjustments are affecting the economy and inflation.*

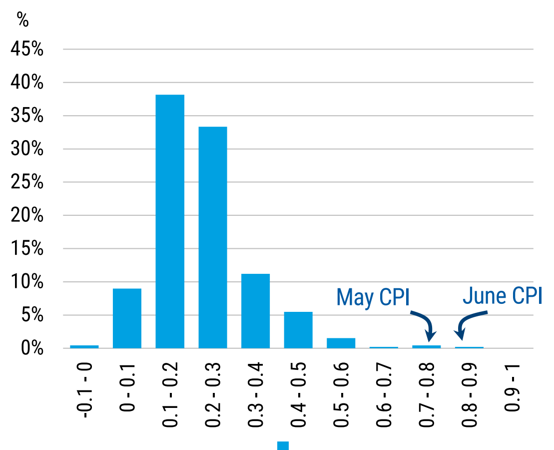
For now, rates markets appear even more sanguine about inflation risks and the ensuing path for policy. The rates market prices a terminal rate of ~3.30% by December 2022 (see Exhibit 11) – below the June FOMC dot plot median at 3.375% (see Exhibit 12). The Fed has only bolstered this market pricing by showing satisfaction with current policy path in the June dot plot.

**Exhibit 13:** 1y1y CPI swap over the last six months




Source: Bloomberg, Morgan Stanley Research

**Exhibit 14:** Frequency of monthly trimmed mean CPI prints in the last 40 years




Source: Bloomberg, Morgan Stanley Research

The current benign market pricing in the front end reflects two main factors: (1) that growth concerns are weighing on the Fed's mind, and (2) inflation prints will come down in the coming months – as evidenced by the recent drastic decline in the CPI swaps – currently suggesting 1y ahead CPI at around 2.9% (see Exhibit 13), pretty close to the Fed's target. The first factor was validated by the Fed today – growth concerns are indeed weighing on the FOMC's mind. However, the second assumption is still pretty optimistic in our view.

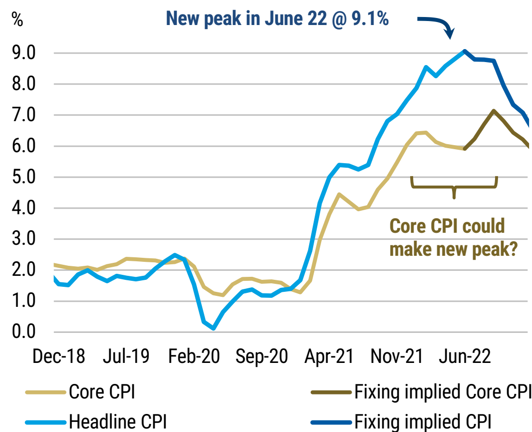
What if inflation risks materialize to the upside? What if inflation turns out to be sticky as it heads lower? Looking at available evidence about the current inflation dynamics, **we think there is a risk that the Fed is underestimating the task of lowering inflation, and may need to pivot back to being hawkish – a medium-term risk that rates markets are highly unprepared for.** Let's look at the near-term and medium-term upside risks.

**Near term – both growth and inflation could look strong:** The near-term path of CPI does not look very helpful to the Fed's current dovish stance. On a headline basis, CPI fixings (for more about CPI fixings, see Fixated on CPI Fixings) suggest headline CPI could be around 8.8% through October, when September CPI is released (see Exhibit 15). Additionally, fixings suggest monthly core CPI prints could hover close to 0.5-0.6% for the next three months, and average 0.4-0.5% in the next six months.

Besides, just a cursory look at the trimmed mean inflation in May and June – the highest monthly prints in 40 years (see Exhibit 14) – makes it clear that CPI inflation isn't merely high, it is entrenched in all corners of the CPI basket. The Fed's rigidity of sticking to the June dot plot seems to us at odds with the recent and upcoming inflation strength.

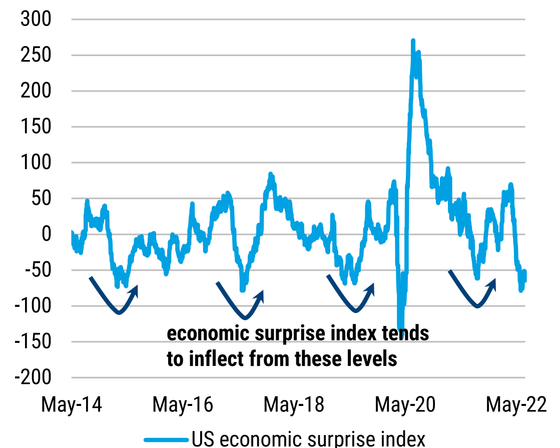
Finally, **growth is more likely to surprise to the upside than inflation to the downside.** On the growth side, while there have been mixed data recently – strong payrolls and retail sales, but weaker ISM numbers – the US economic surprise index is running close to its local lows (see Exhibit 16), at a level where it typically rebounds to upside surprises.

**Exhibit 15:** CPI fixing implied headline and core CPI path in the coming six months




Source: Bloomberg, Morgan Stanley Research

**Exhibit 16:** US economic surprise index in the last eight years



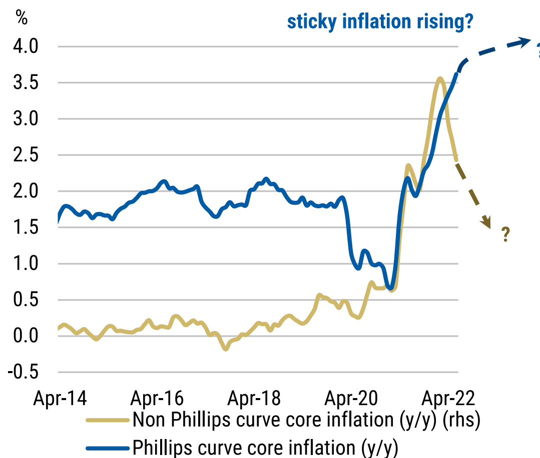

Source: Bloomberg, BGC, Morgan Stanley Research

**Medium-term risks of sticky inflation:** Additionally, one has to ask; How exactly will the CPI inflation come down sustainably in the medium term? We break down CPI inflation into the Phillips curve sensitive and non-Phillips curve sensitive components, and it is noticeable that the Phillips curve sensitive components (see Exhibit 17) that are closely indexed to the labor market strength have been strengthening in recent months.

How can one estimate the strength in the labor market? One way to think about this is what is the short-term NAIRU for the US labor market? This paper from the SF Fed tries to back it out, suggesting that short-term NAIRU might be closer to 6%, much higher than the medium-term NAIRU believed to be below 4%. Comparing the unemployment rate to this estimate, **the unemployment rate can be seen as ~2.5% through short-term NAIRU – the hottest labor market in nearly 40 years - also suggesting how much cooling is in the labor market is needed to lower inflation risks.**

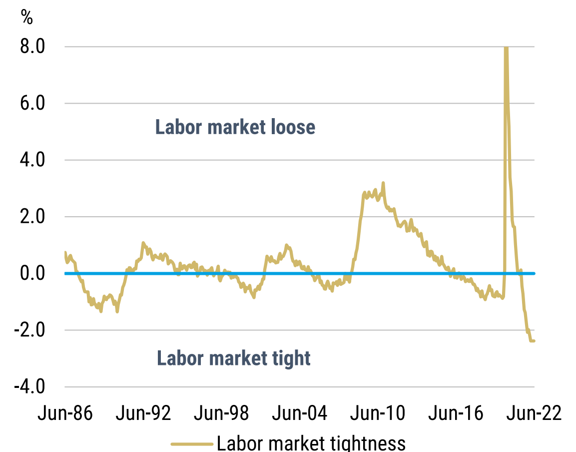
If this estimate of NAIRU is correct, and the labor market is indeed this tight, there is unlikely to be a sustainable decline in inflation until unemployment rate picks up. The unemployment rate hasn't even started moving higher, while the Fed has already pivoted dovish. Thus there is a risk that the Fed may need to return to a hawkish tune over the coming months, reversing this latest dovish pivot at the July meeting.

**Exhibit 17:** CPI inflation broken down by Phillips curve and non-Phillips curve sensitive components




Source: Bloomberg, Morgan Stanley Research

**Exhibit 18:** Estimates of labor market tightness using SF Fed's short-term NAIRU estimate




Source: Bloomberg, Morgan Stanley Research

**How to trade?** We think there are upside risks to both inflation and growth, and yet it is hard to trade for higher rates when the Fed has almost committed itself to a pre-set destination. While there is a chance markets could price a 75bp hike in September, it is likely that the incremental hike pricing in September will come at the expense of rate cuts down the line, making it hard to go short duration for any maturity.

While there could be another opportunity for investors to play for higher yields in the medium term, we think it'll require another hawkish pivot from the Fed for the markets to do that. After the July FOMC, **we suggested closing our 1s10s curve flatteners and our short the March FOMC contract (FFJ3).**

**The optimal expression in the current market is to be long 1y1y CPI swaps, offering three attractive features:** (1) it positions well for short-term inflation strength, as well as the risk of sticky medium inflation , (2) it performs better in the current environment where the Fed has turned dovish, and (3) the entry point looks attractive vs. recent history.

## August Treasury Refunding Preview

The upcoming Treasury refunding meeting, on August 3, should shed further light on how the Treasury intends to finance borrowing needs to the market in response to QT. QT officially began on June 1 with an initial cap for Treasury securities of $30bn per month for three months and in September will increase to a maximum cap of $60bn per month.

Accounting for QT, we think the US Treasury will need to fund an additional $330bn and $720bn from the private market in 2022 and 2023 (see Exhibit 19). A slower ramp-up of QT lowers the Treasury's overall funding needs, allows the Treasury to continue its trajectory of coupon cuts, and allows bill issuance to fund a large portion of QT.

**Exhibit 19:** Overall financing and issuance figures, CY2021 - CY2024 ($bn)

| Calendar year | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|
| **KEY FINANCING FIGURES** | | | | |
| Budget Financing Needs | 2704 | 1019 | 1009 | 1140 |
| Cash Balance Increase | -1323 | 244 | 0 | 0 |
| Fed B/S Rolloff from Coupons | 0 | 294 | 646 | 309 |
| Fed B/S Rolloff from T-bills | 0 | 36 | 74 | 51 |
| Net Borrowing Need | 1381 | 1263 | 1009 | 1140 |
| **OVERALL ISSUANCE FIGURES** | | | | |
| Gross Issuance of Coupons, TIPs, and FRNs (ex Fed reinvestments) | 4405 | 3413 | 3099 | 3099 |
| Maturities of Coupons, TIPs, and FRNs (ex Fed reinvestments) | 1729 | 2152 | 2921 | 2765 |
| Net Coupons, TIPs, and FRN Issuance | 2676 | 1261 | 179 | 334 |
| Net T-bills (residual) (ex Fed) | -1295 | 2 | 830 | 806 |
| Net Borrowing | 1381 | 1263 | 1009 | 1140 |
| **PRIVATE ISSUANCE FIGURES** | | | | |
| Fed secondary market purchases of T-Bills | 949 | 75 | 0 | 0 |
| Fed secondary market purchases of T-Bills | 0 | 0 | 0 | 0 |
| Net Coupon, TIPs, and FRN Supply to Private Market | 1727 | 1480 | 825 | 643 |
| Net T-Bill Supply to Private Market | -1295 | 38 | 904 | 857 |

Source: US Treasury, Morgan Stanley Research

We think the US Treasury is likely to continue its trajectory of coupon cuts at the upcoming refunding meeting. We expect the US Treasury will continue to cut coupons across the curve, and then by a disproportionate amount for 7y and 20y auction sizes to bring supply more in line with longer-term demand. Despite messaging TBAC put forth at the May refunding meeting, where it indicated auction sizes were expected to level out in the August quarter, it left the door open to further reductions, stating, "Given the considerable uncertainty surrounding the economy and projected borrowing needs, Treasury will need to retain flexibility in its approach and consider additional cuts if recent trends in receipts continue."

To be precise, **in our base case, we expect the Treasury to continue $1bn cuts per month in the 2y, 3y, and 5y auction sizes as well as continue $1bn cuts in the 10y and 30y for both new issue and re-openings. We expect the Treasury to continue $2bn cuts per month for the 7y and announce $4bn cuts for both 20y new issue** and re-openings, a return to the magnitude from February refunding. At present, we do not expect coupon cuts to continue beyond October for any note or bond.

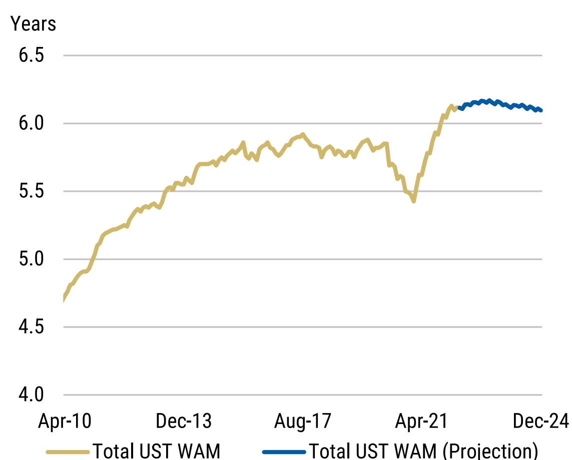
**Exhibit 20:** Gross auction size estimates by tenor and month ($bn)

| Month | 2y | 3y | 5y | 7y | 10y | 20y | 30y | 5T | 10T | 30T | FRN | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jan-22 | 54 | 52 | 55 | 53 | 36 | 20 | 22 | 0 | 16 | 0 | 26 | 334 |
| Feb-22 | 52 | 50 | 53 | 50 | 37 | 19 | 23 | 0 | 0 | 9 | 22 | 315 |
| Mar-22 | 50 | 48 | 51 | 47 | 34 | 16 | 20 | 0 | 14 | 0 | 22 | 302 |
| Apr-22 | 48 | 46 | 49 | 44 | 34 | 16 | 20 | 20 | 0 | 0 | 24 | 301 |
| May-22 | 47 | 45 | 48 | 42 | 36 | 17 | 22 | 0 | 14 | 0 | 22 | 293 |
| Jun-22 | 46 | 44 | 47 | 40 | 33 | 14 | 19 | 18 | 0 | 0 | 22 | 283 |
| Jul-22 | 45 | 43 | 46 | 38 | 33 | 14 | 19 | 0 | 17 | 0 | 24 | 279 |
| Aug-22 | 44 | 42 | 45 | 36 | 35 | 13 | 21 | 0 | 0 | 8 | 22 | 266 |
| Sep-22 | 43 | 41 | 44 | 34 | 32 | 10 | 18 | 0 | 15 | 0 | 22 | 259 |
| Oct-22 | 42 | 40 | 43 | 32 | 32 | 10 | 18 | 20 | 0 | 0 | 24 | 261 |
| Nov-22 | 42 | 40 | 43 | 32 | 35 | 13 | 21 | 0 | 15 | 0 | 22 | 263 |
| Dec-22 | 42 | 40 | 43 | 32 | 32 | 10 | 18 | 18 | 0 | 0 | 22 | 257 |

Source: US Treasury, Morgan Stanley Research

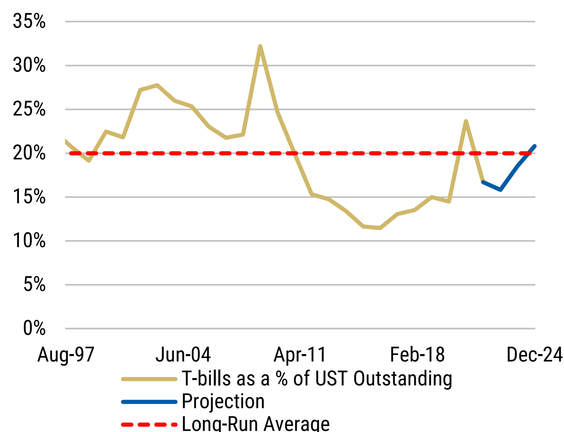
This path of issuance would allow the US Treasury weighted average of outstanding debt to remain stable above pre-Covid levels (see Exhibit 21), while also increasing T-bill share of outstanding debt toward the upper-end of the 15% to 20% recommended range (see Exhibit 12).

**Exhibit 21:** UST WAM Projection in the coming years




Source: US Treasury, Morgan Stanley Research

**Exhibit 22:** T-bills as a % of UST debt in the coming years




Source: US Treasury, Morgan Stanley Research

Our view for a disproportionate cut to 20y new issue and re-openings is informed by the 20y sector's continued underperformance on the curve, measured by the 10s20s30s butterfly (see Exhibit 23). The $4bn cut to 20y new issue and re-openings is simply a return to the max pace for this sector, delivered at the February 2022 and November 2021 refunding meetings. Despite the persistent underperformance in the 20y sector, a larger cut risks an impediment to trading volumes and could also signal concern to the market.

**Exhibit 23:** UST 10s20s30s Butterfly

Source: Bloomberg, Morgan Stanley Research

**Is there a role for Treasury buybacks in the current environment?** As we wrote last week, T-bills trade at rich levels vs. OIS as ample liquidity and uncertainty surrounding the current hiking cycle has incentivized market participants to remain in shorter T-bills. Our August refunding forecast implicitly suggests T-bills will play a large role in financing the additional borrowing as a result of QT, and it is worth thinking about how Treasury buybacks could also help alleviate pressures in the T-bill market.

A Treasury buyback is a purchase of US Treasury debt by the Treasury and subsequent cancellation of that debt. A buyback is a consensual transaction, and thus differs from a redemption at maturity or exercise of a call option. Over the past century, the Treasury has only instituted two buyback operations, the first series in the 1920s and the second during 2000-2002. A New York Fed paper concluded buybacks could make positive contributions to Treasury debt and cash management objectives even in the absence of a budget surplus.

As the Treasury has moved away from pandemic-induced elevated borrowing needs coupled with unexpectedly strong tax receipts, its strategy thus far has been to cut coupon auction sizes. However, shrinking new auction sizes could begin to have an effect on Treasury market liquidity. Instead, the Treasury could use a program to buy back old, seasoned issues while keeping new auction sizes higher to promote trading volumes and liquidity.

Implementing buybacks could also help the Treasury limit a rise above its currently elevated cash balance (at a time when the fed funds rate is historically low), avoid a further deterioration in Treasury market liquidity, and increase T-Bill issuance to help alleviate the richness of bills.

**Trade idea: Close short FFJ3 contract at 96.72**
**Trade idea: Close 1s10s flatteners at -25bp**
**Trade idea: Maintain long 1y1y CPI swap at 295bp**

# Euro area | Duration back to December 2021 mispricing

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**Exhibit 24:** Summary of our EUR views

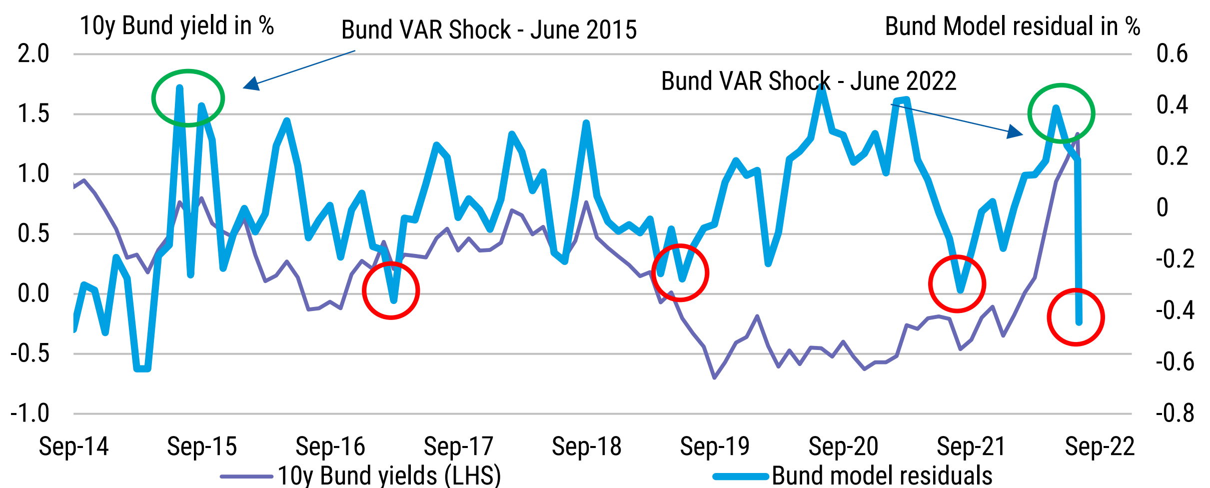
| 1-month horizon | Duration | Curve | Inflation | ASW | EGB spreads |
|---|---|---|---|---|---|
| Macro | Bearish | Flatter | Higher | Stable | Wider |
| Net supply after QE | Neutral | Steepeners 2s10s | | | |
| Valuation | Bund 43bp rich | EUR 10s30s swap 8bp too flat | EUR 10y10y swap 7bp rich | Bobl and Bund ASW 3/4bp below FV | 2y BTP 35bp cheap vs Bono |
| Seasonality | Bund bullish seasonal over | BTP 10s30s steepening from d8 - 82% | | Bund/OAT ASW tightening from d5 | |
| Technical analysis | Weekly stochastics at overbought levels | | | | |
| Market positioning | CTAs increased longs | 2s5s/2s10s flatteners | Long 2y to 5y maturities | Short Bund ASW | Short OATs |
| Preferred trades | Structural short | **Close 5s10s BTP flatteners** | Long EUR 5y5y inflation | | **Close 5y Bono vs Obl** |
| | Long Sep 149/147/146 broken put fly | Paid EUR 10s30s swap | | | Short 30y BTP vs OAT |
| | Pay EUR 10y10y swap | Long EUR 2s5s10s swap fly | | | |
| | | Long June 23 FRA/€STR basis | | | |
| **Our view** | **reversal by mid-August** | **10s30s in range -25/-0 range** | **Higher** | **Stable** | **Stable non-core spreads** |

Source: Morgan Stanley Research

## Duration

Ten-year Bund yields broke the 1% threshold this week while we had a renewed rise in inflation expectations at the short end due to spiking natural gas prices. On the valuation side, with the last leg of the rally post US 2Q GDP, 10y Bund yields are richer than the level of mispricing versus our long-term Bund model witnessed in early December 2021 - 43bp versus 30bp at that time. It was one of our arguments at that time to call for a 50bp sell-off in Bund yields into 1Q22. As Exhibit 25 illustrates, with the exception of March 2015 (the start of the ECB QE 1), the dislocation has gone below -30bp only four times in the 2014-2022 period: in February 2017 for the French presidential campaign, in May 2019, in July 2021, and for a few days in December 2021. With the exception of 2019, when the market was speculating on QE 2 and aggressive ECB depo cuts to more negative rates (it took three months until the ECB disappointed the market with only a 10bp depo cut), the dislocation got corrected over one month. Interestingly, in contrast to the previous periods, we believe the Bund fair value is likely to keep increasing significantly in the coming months, which would imply that the return to fair value will lead to major rise in yields.

**Exhibit 25:** Below December 2021 dislocation levels

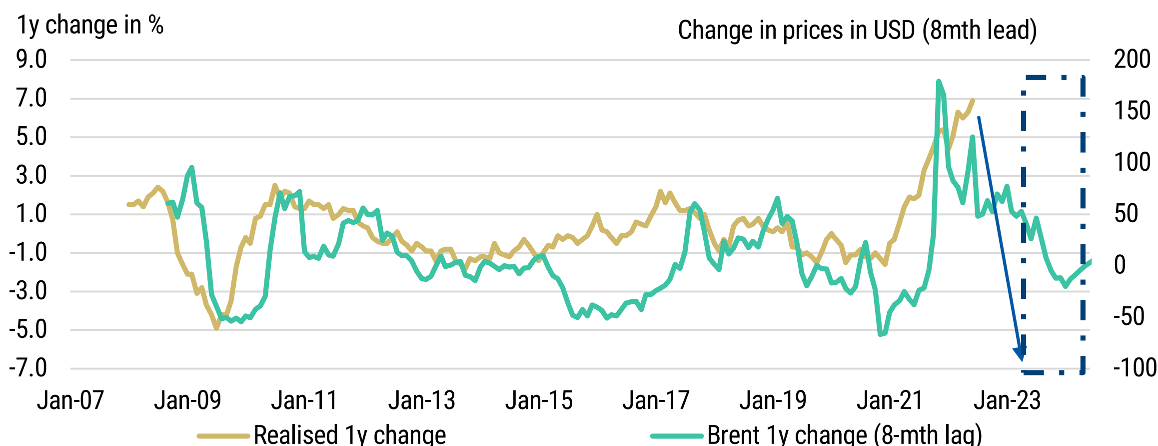



Source: Bloomberg, Morgan Stanley Research

On the positioning side, the latest statistics from the Eurex showed that between pre and post ECB Thursday meeting, the net short on the bobl futures for final investors got reduced by 50%, while the net long on the Bund future doubled to represent almost EUR3m DV01 at the start of the week.

Unsurprisingly, the major Bund rally since mid-January has been consistent with a major repricing of inflation expectations: the EUR 1y1y inflation swap fell from a peak of 3.09% to 1.95%. However, the dynamics have changed over the past few days due to the spike in gas prices. We struggle to see a prolonged decoupling between rising inflation expectations at the short end and stable to lower nominal yields at the long end. Moreover, we do not think that yoy Eurozone HICP inflation will decline by more than seven points from a peak in September. As Exhibit 26 shows, market expectations regarding the decline in Eurozone HICP inflation over the coming year are historically extreme for the 2008-2022 period. Even after the Lehman collapse, the realised decline in eurozone inflation was much less extreme, while the yoy change in Brent prices was around 55%. This time, our commodity analysts expect a low in 1Q23 Brent prices around USD90bn followed by a gradual rise (see Super-Cycle Ceiling), which would make it very unlikely that market expectations for a sharp decline of the Eurozone HICP inflation next summer will be realised. Historically, periods of decoupling between nominal and inflation swaps have been short-lived. A gradual rise in short-dated inflation swaps should fuel the rise in nominal yields all along the Bund curve.

**Exhibit 26:** Observed and expected 1y change in Brent prices and EZ HICP inflation




Source: Bloomberg, Morgan Stanley Research

Finally, in contrast to market expectations, our US economists do not expect the Federal Reserve to ease its key rates before December 2023, with the Fed remaining on hold most of 2023. That Fed status quo would mean that the ECB's window for monetary policy normalisation is longer than investors thinks (Weaker Growth, Higher Inflation). It makes the scenario of higher EUR long-term rates more likely.

As observed during the summer or in December 2021, with that currently overstretched valuation, we think 10y Bund yields could hover close to 1% in the very near term before significantly adjusting higher and breaking the 2% threshold by the end of 3Q22 (Global Macro Strategy: European Rates: Peak in Core Yields in Early 4Q22).

**Trade idea: we keep our September 149/147/146 broken put fly**

**Trade idea: we maintain our EUR 10y10y swap and our long EUR 5y5y inflation swap**

## Non-core EGBs

As forecast in our ECB reaction idea note: Bigger Hike a New Tool, following a 40bp widening in a couple of days, we were expecting some profit-taking on the 10y BTP/Bund spread. After a 15bp compression post ECB day, the spread is back to the recent wides – S&P decision's to revise Italy's sovereign debt outlook from positive to stable was behind that move.

Although we think the ECB TPI with its no ex-ante limit removes the tail risk scenario, we do not see the 10y BTP/Bund spread tightening before late September for the following reasons:

– With core duration back to very expensive levels, the resumption of the bear market on core EGBs and swap yields should also weigh on BTPs. We believe it is only when long-term core yields have stabilised, likely sometime in 4Q22, that real money investors could be more keen to increase their allocation of lower credit EGBs.

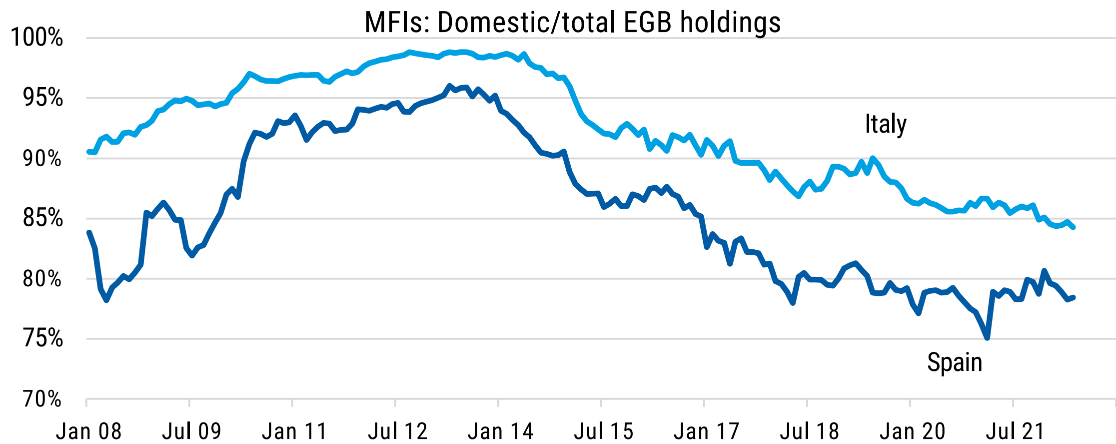
– A major headwind for BTPs is the currently high historical volatility. Exhibit 27 shows the 3-month historical volatility for 2y, 5y, and 10y BTPs. Historical volatility has doubled since late 1Q to be closer to the 2Q20 peak. We do not see a return of real money investors until historical volatility stabilises and starts to edge lower.

**Exhibit 27:** BTP 3-month historical volatility kept in rising toward 2020 peak

Source: Bloomberg, Morgan Stanley Research

– On the positive side, both the share of non-resident holdings of BTPs (around 28.2% in May 2022, according to the Bank of Italy's statistics) and the relative share of domestic holdings of EGBs for Italy MFIs have reached record lows (see Exhibit 28). It means that once the political uncertainty vanishes, perhaps post 2023 budget adoption, we could see some renewed demand from non-domestics investors, conditional to the lower historical volatility and some buying from domestic banks.

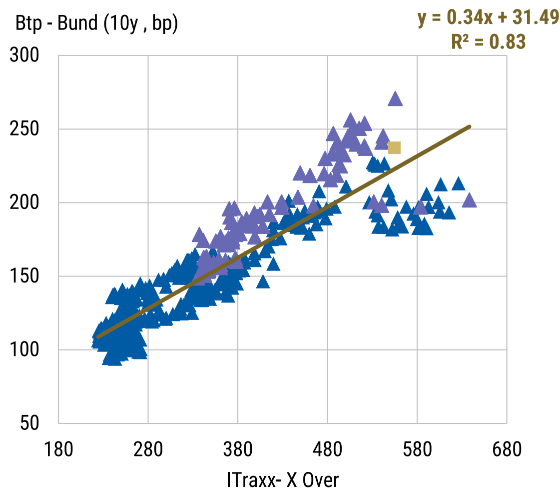
**Exhibit 28:** Italian MFIs: relative share of domestic holdings are at record lows




Source: ECB, Morgan Stanley Research

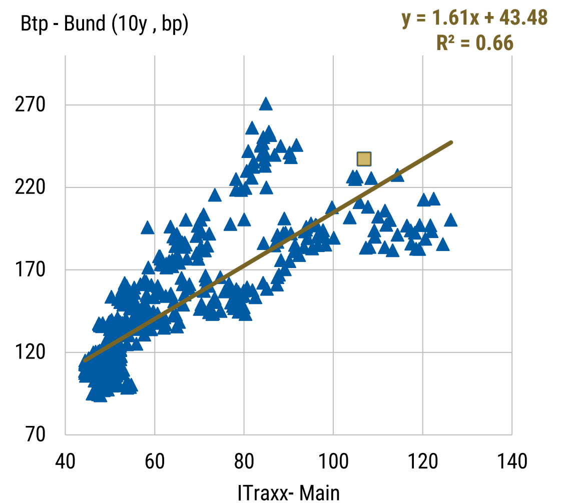
– Versus the Itraxx main and crossover, the 10y BTP/Bund spread, which was around 20bp rich when it was trading below 200bp in late June, went up to 25bp too cheap this week (see Exhibit 29).

**Exhibit 29:** BTP/Bund vs. Itraxx crossover




Source: Morgan Stanley Research

**Exhibit 30:** BTP/Bund vs. Itraxx main




Source: Morgan Stanley Research

All in all, we consider the risk of a major rise of the 10y BTP/Bund spread from the current level is limited over the coming month – the lower BTP supply should also help. Accordingly, we prefer closing the BTP 5s10s tactical flatteners.

Regarding the Bono/OBL structural widening trade initiated on the 5y at 38bp, it went very quickly above our 80bp target in June before stabilising back recently. With the TPI and the uncertainty in Italian politics in the near term, Bonos could benefit from a reallocation out of BTPs, which could cap spreads. We prefer closing the widening trade at current levels and waiting for better entry levels.

**Trade idea: we close our tactical BTP 5s10s flatteners**
**Trade idea: we close our short 5y Bono vs. OBL**
**Trade idea: we maintain our short 30y BTP vs. OAT**

# United Kingdom | Relentless real rate rally

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**Exhibit 31: Summary of our GBP views**

| 1-month horizon | Duration | Curve | ASW | Inflation |
|---|---|---|---|---|
| Macro | Neutral | Steeper | | Bullish |
| Net supply | Neutral | Steeper | | |
| Valuation | | GBP 10s30s swap 5bp too steep | | |
| Seasonality | | GBP 2s5s flattening for 8d in Aug - 86% | Tighter from d14 in August- 80% | |
| Technical analysis | Daily stochastics at overbought levels | | | |
| Market positioning | CTA short | | | |
| Preferred trades | Long IL31 | **Long UKT 1E 39 vs 4Q 32 and 1Q51**<br>Rec Sep 22 MPC meeting | **Close UKT 0H 61 ASW** | Long 5y UK RPI swap |
| **Our view** | **Close long duration positions** | **Steeper curve** | **Neutral on spreads** | |

Source: Morgan Stanley Research

## Relentless real rate rally

The real yield rally across various markets stood out this week. The signs so far point to a deceleration in growth with a softening in inflation being less imminent. If the BoE delivers policies in line with the July FOMC, that would be the most supportive outcome for our trades: hiking but acknowledging the roadblocks ahead of us.

We believe that, at least in the UK, this theme has more to go. In our view, the UK and the BoE are in no better place than other geographies and the SONIA curve prices significant cumulative hiking over the next three meetings (124bp) relative to the US Fed (92bp) and the ECB (99bp). So in the near term, we can envision a less restrictive BoE to facilitate a drop lower across real yields.

Later in the year, it will be about politics and supply. We discussed the interplay of politics and rates trades here. And we think that fiscal policy will play a decisive role in the evolution of the market in the next months. But the market will have to price one story at a time and in our view, this is the shift of central banks to the less restrictive side, with the BoE likely to deliver that next week. So real yields longs are our favourite expression.

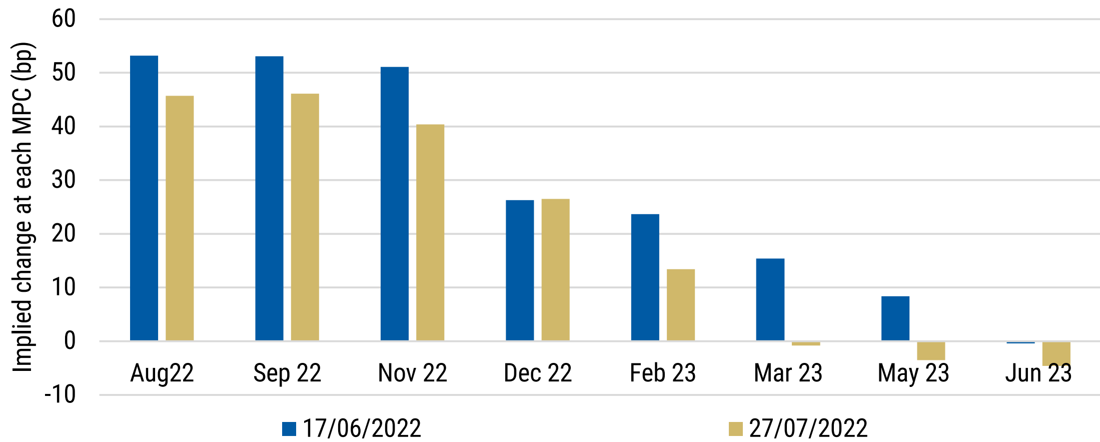
*The following section has previously been published here*

### Rates: Long IL31, 5y RPI and Rec Sep-22 MPC

**Money markets:** Activity in short-dated swaps picked up this year, with every MPC meeting being a 'live' one both with respect to the delivery of a hike and also its magnitude. Exhibit 32 shows changes in the pricing of the MPC meetings since the June MPC. We can clearly see that while the market was pricing in **at least** 50bp of hikes in each of the upcoming three meetings, this has moderated and currently all three meetings are below 50bp.

Timing matters and, if the BoE does not deliver the 50bp hike at the upcoming meeting, the obvious risk for the market is to cut/reduce the almost 50bp hike at the September meeting. In other words, if the BoE has to hike faster than before, this will have to be sooner rather than later. So, in our view it makes sense that the market now prices more for the August than the September meeting. In fact, we think that September 2022 is one of the best meetings to receive given the aforementioned asymmetry, and we maintain our receive September 2022 recommendation.

**Exhibit 32:** Change in the implied pricing of MPC meetings since the June 2022 MPC

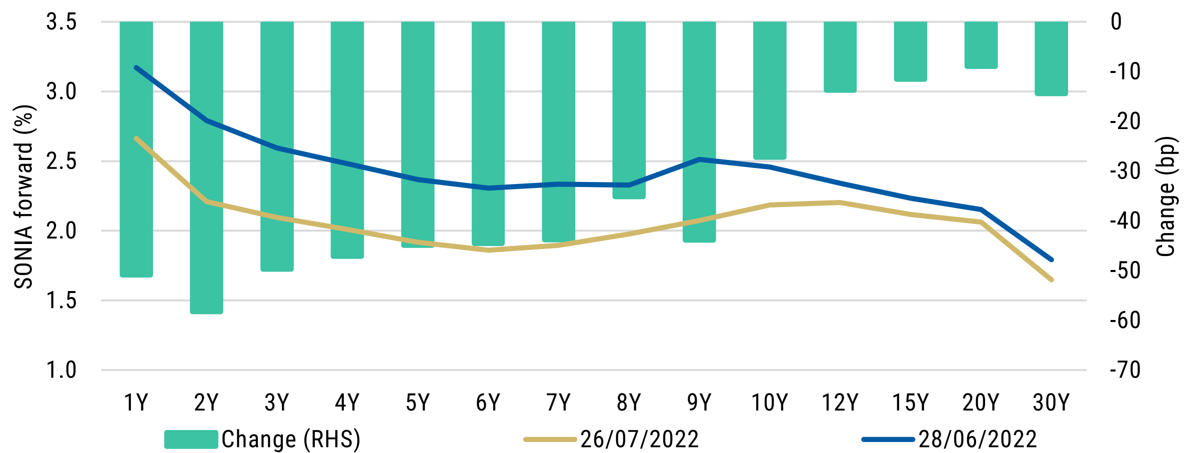



Source: Bloomberg, Morgan Stanley Research

**Curve:** Over the last month, while the market has moved into pricing risks of slowdown/recession, it remarkably did this with substantially lower forwards around the 10-year sector (Exhibit 33). This is no coincidence – it has been driven by a reduction in short futures positions.

An under-delivery of a hike should lead to a bull steepening of the curve. The biggest two challenges that we faced with slope trades are: 1) That other central banks (Fed and ECB) increased their tightening pace, hence exerted flattening pressure; and 2) Steepeners are inherently short-convexity positions and delivered vol in this environment is abating very slowly.

**Exhibit 33:** Strong participation of the 10-year point in the bullish rates move over the last month

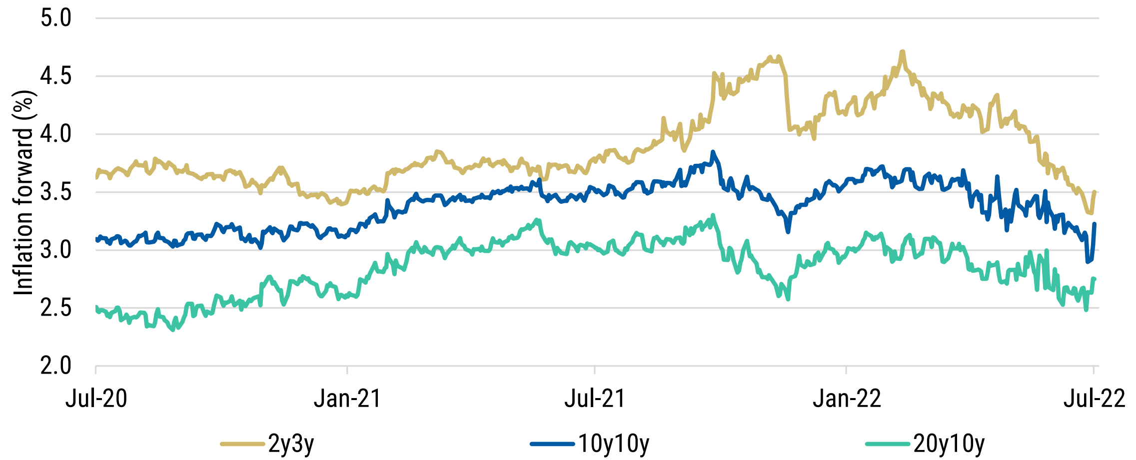



Source: Bloomberg, Morgan Stanley Research

**Inflation-linked:** To the extent that the BoE surprises to the dovish side, we expect a bull steepening of the real yield curve, with the bullish element dominating. Our favourite trade heading into this BoE meeting is once again **long real yields IL31.**

The BoE is likely to have a look at inflation expectations across the curve (Exhibit 34). If we exclude the last couple of trading sessions (inflation swap widening on gas disruption fears), inflation forwards have been on a continuous downtrend and these data create less of an impetus for the BoE to accelerate the pace of hikes.

**Exhibit 34:** Various market-implied inflation forwards have moved lower

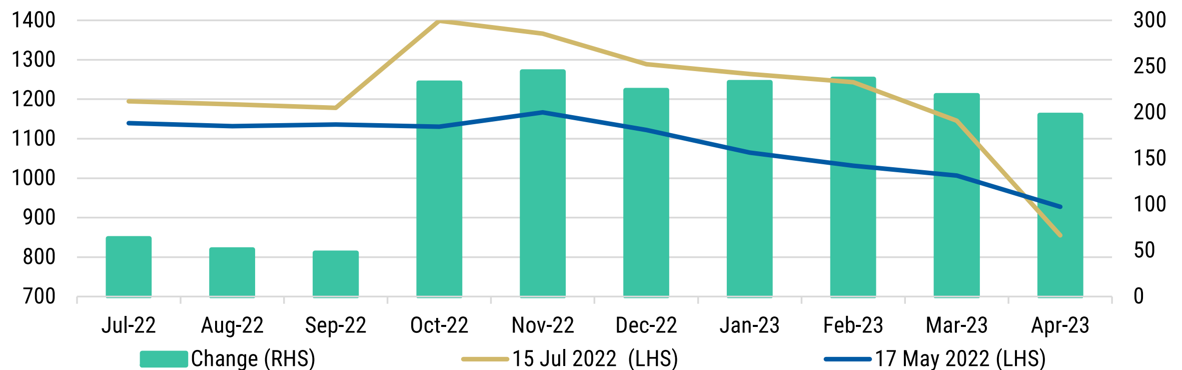



Source: Morgan Stanley Research

But near-term inflation expectations have been revised higher. Exhibit 35 shows changes in near UK RPI fixings over the last two months – about 200-250bp higher in the fixings of the next OFGEM period (October 1, 2022-March 31, 2023) with Oct-22 RPI being priced at 14%Y. In theory the BoE will have to respond to inflation expectations (which have been soft).

Heading into the meeting, we maintain our bullish stance towards 5-year RPI swaps. A BoE that leans towards slower hikes should support a flatter breakeven curve.

**Exhibit 35:** Pricing of the OFGEM cap increase is reflected through higher RPI fixings



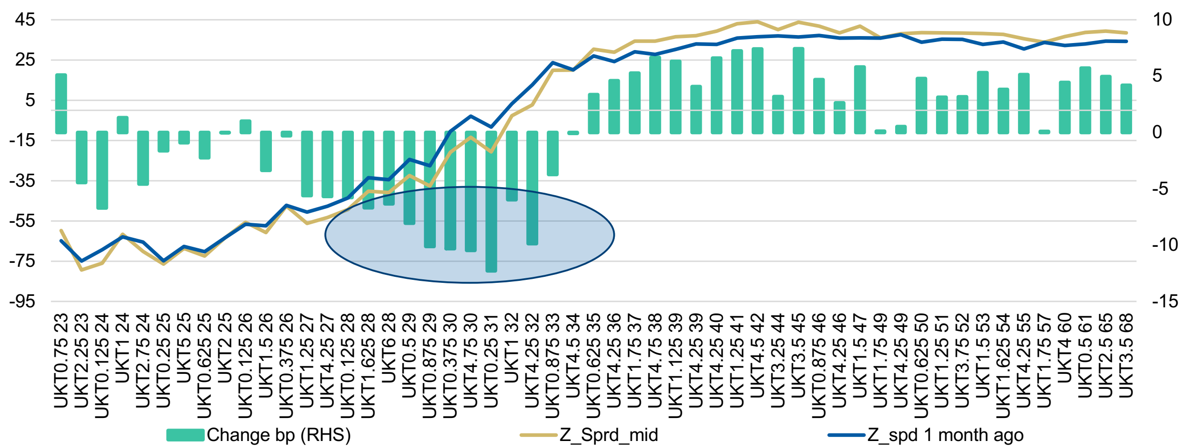

Source: Morgan Stanley Research

**ASW term structure:** It is widely expected that the BoE will bring up QT at this meeting, and hence short spread positions at the front end of the curve have yet again gained popularity. We have in the past argued against such positions, due to the fear that the catalysts for the move were non-existent or insufficient.

So far Governor Bailey has hinted at a balance sheet total roll-off towards £50-100 billion per annum. Assuming a passive roll-off at around £35 billion per annum, this takes us to a £15-65 billion range, which is clearly wide. Even if we were to face sales of around £65 billion per annum or £5 billion monthly (which is the upper end), we doubt that this will be delivered immediately. So, we can see a case of knee-jerk euphoria on a QT announcement just to be followed by disappointment once someone digs into the specific numbers and the weekly cash flows. But this will mostly be a story for the sub-10-year sector.

At the long end, we think that the story is different. We have been long spreads for a while (UKT 0H 61) and following the gilt index extensions and the recent ASW richening we want to take profit and close the position.

**Exhibit 36:** Strength at the front end and the 10-year sector




Source: Morgan Stanley Research

**Trade idea: Maintain Buy IL31: Enter -1.87%, stop -1.4%, take profit -2.4%**
**Trade idea: Maintain Buy 5y UK RPI swap: Enter 4.26%, stop 3.8%, take profit 5%**
**Trade idea: Maintain Rec Sep'22 MPC: Enter: 1.68%, stop 2.25%, take profit 1.5%**

# Japan | Further short-covering likely

MORGAN STANLEY MUFG SECURITIES CO., LTD.

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The BoJ used its July meeting to once again rule out any possibility of the central bank tightening its monetary policy settings in response to JPY depreciation and/or commodity-driven inflationary pressures.

Deputy Governor Masayoshi Amamiya—currently viewed by many market participants as the one of the frontrunner to succeed current Governor Haruhiko Kuroda when he leaves office next April—followed up in a July 28 speech by explaining what “achieving the price stability target” will mean in practice, while also reiterating the importance of stronger wage growth:

> *Achieving the price stability target does not mean that the year-on-year rate of change in the CPI temporarily reaches 2 percent due to an exogenous increase in import prices such as energy, but rather that* ***the rate registers 2 percent on average over the business cycle****.*
>
> *(...) What is important is to achieve a virtuous cycle where wages and prices rise simultaneously and people's living standards improve amid continued growth in the economy.*

As discussed in "Only One" Central Bank In The G10 World", the BoJ is currently aiming to drive up wages by stimulating the economy via its monetary easing and thereby keeping labor market conditions as tight as possible:

> *The Bank will continue to firmly support economic activity through monetary easing, aiming to achieve the price stability target, accompanied by wage increases, in a sustainable and stable manner.*

**Comments such as the above leave little doubt as to the BoJ’s intention to persist with current (highly accommodative) monetary policy settings until presented with clear evidence of adequate wage growth.**

The Fed meanwhile hiked its policy rate by a further 75bp on July 27 to a level that Chair Jerome Powell characterized as “right in the range of what we think is neutral”. Powell also hinted at a more gradual pace of rate hikes going forward, saying that the central bank is now going to “assess how our cumulative policy adjustments are affecting the economy and inflation” out of recognition that it may take some time for the actual economic impact of monetary tightening to become apparent.

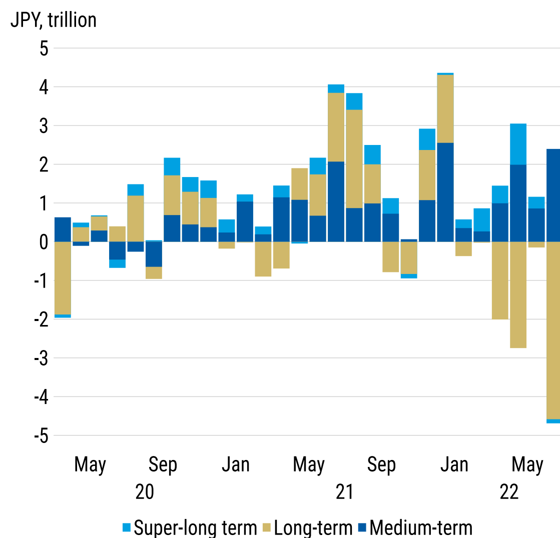
With the BoJ sticking well and truly to its easing policy and the Fed adopting a somewhat dovish tone in response to recent (deteriorating) economic data, **we currently see little justification for shorting duration through the belly of the curve in at least the near term and believe that duration-long strategies might end up being supported by** the usual "summer rally".

As discussed in "Only One" Central Bank In The G10 World", while overseas investors do already appear to have unwound roughly the face-value equivalent of the JGB-short positions that they initiated ahead of the June BoJ meeting, they are still likely to be very heavily underweight in the long-term sector (see Exhibit 37).

**We thus see potential for further short-covering if global interest rates continue to be depressed by worsening economic data and associated recession concerns, for which reason we are maintaining a (short-term) bullish stance on 5y- 10y JGBs.**

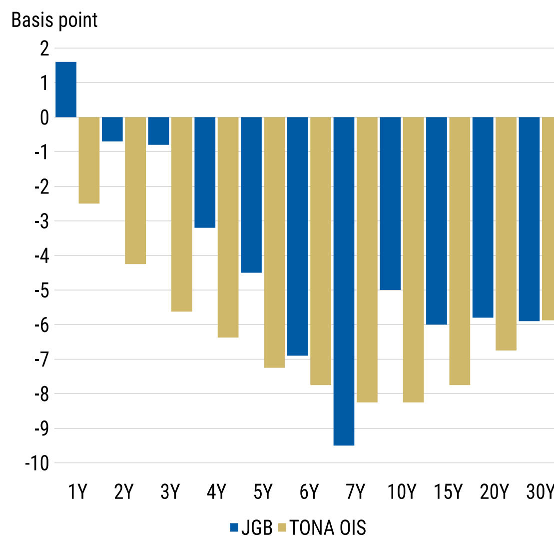
What about further out the curve? Super-long JGBs did stage a short and sharp rally as short-covering flows dominated in the wake of Tuesday's 40y auction, but the 10y+ curve has subsequently snapped back, with JGB 10s30s curve almost unchanged on w/w basis while TONA OIS 10s30s curve rather steepened (see Exhibit 38).

**Exhibit 37:** Overseas investors had heavily underweighted long-term sectors




Source: JSDA, Morgan Stanley Research

**Exhibit 38:** Not much change in JGB 10s30s curve over a week (one week yield changes on both JGB and TONA OIS)

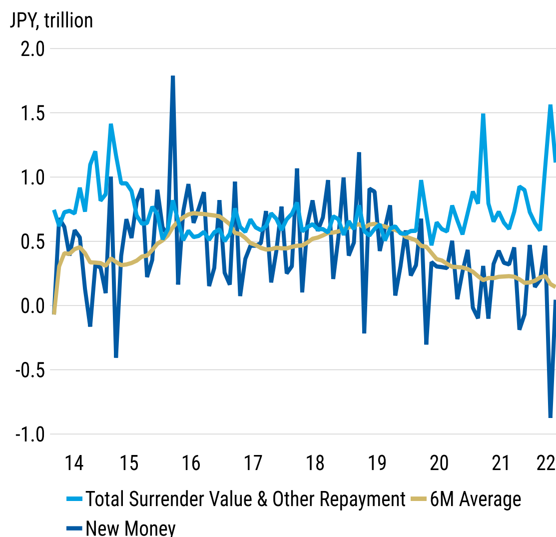



Source: Morgan Stanley Research, Bloomberg

As discussed in "Fading Any Flattening Move Ahead Of BoJ MPM", life insurers appear in no particular hurry to add to their holdings at this juncture, with net cash inflows having been limited by foreign-denominated policy cancellations (see Exhibit 39), recent bear-steepening of the 10y+ curve reducing the need to take on additional duration for regulatory compliance purposes, and many lifers still expecting yields to have reached more attractive levels by 2H FY2022.

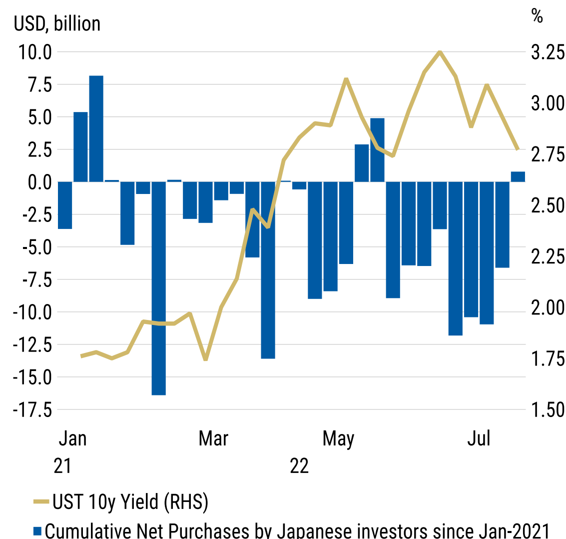
How about the banking sector? Domestic investors last week bought up foreign bonds (albeit only very modestly) for the first time in nine weeks (see Exhibit 40), suggesting that some may have started to worry about being "caught short" over the summer break as global recession concerns continue to drive overseas interest rates lower.

**Exhibit 39:** Japanese lifer's new money inflow have reduced this fiscal year on the back of increasing surrenders




Source: The Life Insurance Association of Japan, Macrobond, Morgan Stanley Research
Note: New money = Premium income - Total claims/annuity/benefits - Total Surrender value/other payments

**Exhibit 40:** Japanese investors turned slight net buyers of foreign bonds for the first time in nine weeks




Source: Japan Mof, Morgan Stanley Research

Banks might also start to show somewhat greater interest in 20y JGBs if they sense that upside pressure on yields could be easing, but we as yet see little prospect of concerted duration-building initiatives given the risk of another overseas yield sell-off, as further overseas rate hikes remain a very real possibility in the absence of evidence that global inflation is cooling.

20y JGB ASW will probably continue to see at least some demand from regional financial institutions, but that alone might prove insufficient to fully absorb what is left over from the ¥1.2 trillion in monthly supply of 20y JGBs after subtracting out the BoJ's relatively modest purchases (see Exhibit 41).

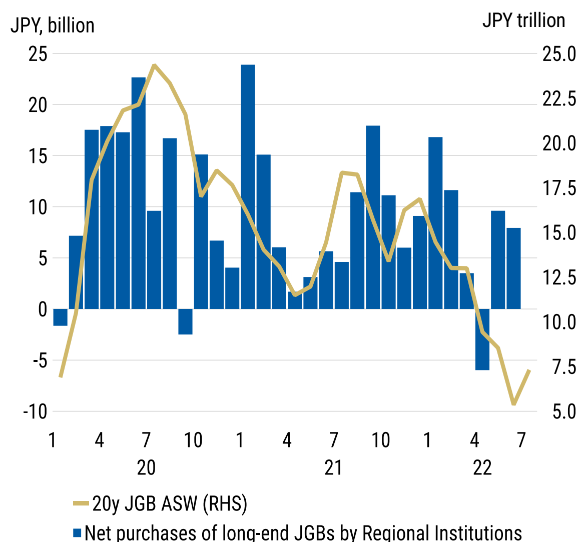
Supply/demand imbalance thus looks likely to remain a problem in the super-long sector for at least the time being, with the 10y+ portion of the curve liable to face further (possibly quite strong) steepening pressure as a result. We therefore suggest sticking with 10s20s JGB steepeners at this juncture.

We also expect the TONA OIS curve to steepen further, with overseas curves facing twist-steepening pressure of late. The Fed's more dovish tone has triggered a downward repricing of the envisaged terminal policy rate level. Positioning for further rate hikes dialed back more globally given that the Fed was one of the fastest central banks to shift into tightening mode and has now basically become the first to adopt slightly more measured language.

This also seems to be true in Japan given the BoJ's apparent intention to remain in easing mode. The recent sharp sell-off in USD/JPY also helped speculators to give up on the prospect of a near-term rate hike. The short-end of the TONA OIS curve has now priced out most of the near-term rate hike pricing, and thus we suggest closing our receive 1y1y TONA OIS position.

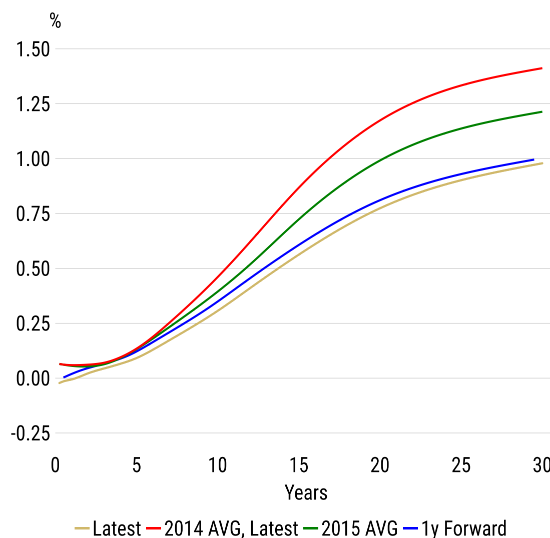
Longer maturities, meanwhile, look likely to face steepening pressure in line with the broader global trend. We suggest shifting the long leg of steepeners from the 10y sector to the 5y sector given that the former now appears to have richened to an extent, and we now expect the 5y sector to remain cheap vs the level seen in 2014/2015 when the negative interest policy and YCC were yet to be introduced (see Exhibit 42).

**Exhibit 41:** Regional institutions continued to purchase longer-end JGBs likely via ASW, but the total purchase size seems small vs supply from the MoF




Source: JSDA, Morgan Stanley Research

**Exhibit 42:** Longer-end tenor still seems to have room to cheapen




Source: Morgan Stanley Research

**Trade idea: Close receive 1y1y TONA OIS**
**Trade idea: Maintain JGB 10s20s steepener**
**Trade idea: Shift TONA OIS 10s20s steepener to 5s20s steepener**

# Currency & Foreign Exchange

**United States**

USD | Use your changeovers wisely

My old tennis coach used to tell me, "use your changeovers wisely." Use the respite to re-focus, strategize, and prepare for what comes next. Don't just sit and wait; prepare.

It seems FX, specifically the USD, is having its own "changeover" at the moment, and our concern is that investors are getting complacent. There seems to be a growing assumption that softening growth will lead to less hawkishness from the Fed, a view affirmed by the Fed meeting this week.

We're less convinced, and recommend using this potential consolidation in risk and the USD to add to USD longs, particularly versus the EUR. Inflation remains the key factor motivating the Fed, and CPI fixing markets imply continued increases in core CPI. Moreover, structural caps on labor supply and the acceleration in Phillips curve sensitive inflation components suggest that labor demand may have to be crimped even more than usual. At the same time, the market is implying a fed funds rate 100bp below the June median "dot" for 2023.

This complacency is unlikely to last forever, particularly if there is an unexpectedly high US CPI print on August 10. We recommend investors use this "changeover" to plan ahead for the future, rather than dwell on past frameworks.

**Europe**

GBP | BoE preview: Downside risks priced in?

We stay neutral on GBP heading into the August BoE meeting. On the one hand, the market is pricing a high probability of consecutive 50bp hikes in the next three meetings (with 130bp worth of tightening priced in by November). Our economist sees only 25bp hikes for the rest of the year, coupled with lower growth and higher inflation forecasts. 2-year yield differentials have been an important driver of both GBP/USD and EUR/GBP over the past year, and so a smaller-than-expected hike (and dovish guidance) could see GBP moving lower in the immediate aftermath of the meeting.

That said, growth expectations have been the single most important driver of GBP performance. Our economist expects UK economic momentum to slow further, but this is already largely expected by markets – with the BoE being one of the first few G10 central banks to have warned about the risk of a recession. In fact, a lot of the negative catalysts we were looking for (including lack of additional fiscal support and renewed political uncertainty) have materialised already, leaving little to surprise the market amid already short positioning. The broad-based USD strength we expect should keep putting downward pressure on GBP/USD, but we see scope for GBP to outperform relative to its European peers – particularly if

the BoE delivers a 50bp hike at the August meeting and/or markets price in an even worse outlook for the euro area economy.

## G10 FX Trades

**Exhibit 43:** G10 FX trade ideas

| Spot trades | Spot | Target | | Stop | |
|---|---|---|---|---|---|
| **Maintain** | | | | | |
| Short EUR/USD | 1.0161 | 0.9700 | 4.5% | 1.0500 | -3.3% |
| Long CHF/NOK | 10.159 | 11.000 | 8.3% | 9.800 | -3.5% |
| Short AUD/CAD | 0.8917 | 0.8400 | 5.8% | 0.9000 | -0.9% |
| **Options trades** | | Entry/cost/premium received | | | |
| **Maintain** | | | | | |
| Long 3m USD/JPY seagulls (long ATMF/140 call spread, sell 128 put) at a cost of 0.7% (priced 28-Jun-22) | | | | | |

Source: Bloomberg, Morgan Stanley Research

## USD | Use your changeovers wisely

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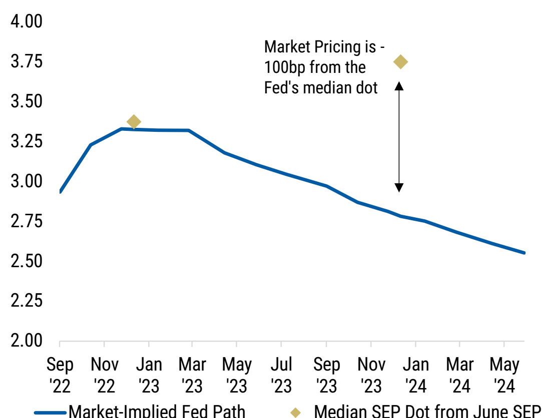
My old tennis coach used to tell me, "use your changeovers wisely." Use the respite to re-focus, strategize, and prepare for what comes next. Don't just sit and wait; prepare.

It seems FX, specifically the USD, is having its own "changeover" at the moment. This week's FOMC struck a modestly dovish tone in that it eschewed a mega-hike of 100bp but also seemed to show signs of affirming a growing market narrative: that the FOMC will ultimately slow its hiking pace and perhaps even cut in the future in response to the softening growth outlook. This narrative is evident in market pricing, which shows a current terminal rate of 3.3-3.4%, below the median dot, and implied cuts by end-2023 (Exhibit 44).

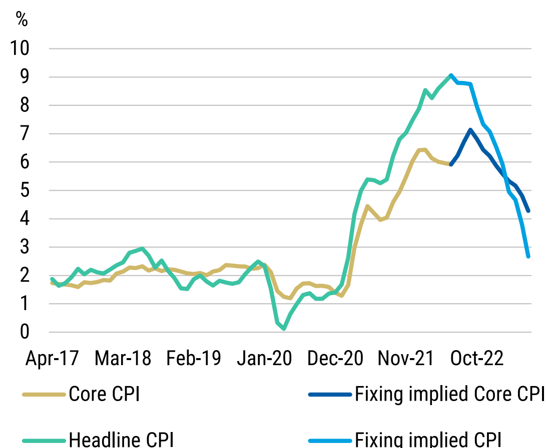
This growing narrative has offered a respite in the persistent USD rally – a changeover, if you will – but we think markets are getting complacent. They're sitting and waiting, not preparing. **We think the market is underestimating the persistence and stickiness of high inflation as well as the Fed's resolve in tightening policy to fight said inflation. We thus recommend using this "changeover" of USD weakness to re-establish USD longs, particularly in EUR/USD, rather than getting complacent.**

**Exhibit 44:** Markets are pricing roughly -100bp of negative term premium compared to the Fed's median SEP "dot"




Source: MS STIRT Desk, Federal Reserve, Morgan Stanley Research

**Exhibit 45:** CPI fixing markets imply that headline CPI will stay elevated while core CPI may accelerate further




Source: Bloomberg, Morgan Stanley Research

We have previously highlighted two necessary conditions that need to be met before the USD can peak and turn lower: Fed pricing has to peak, and global growth expectations have to bottom. Neither seem likely to be met anytime soon.

We think Fed pricing has further room to rise, in turn a function of inflation surprises. CPI fixings markets have done a better job at forecasting inflation than consensus forecasts of late, and they imply that not only would headline CPI remain stubbornly high around 9%, but core CPI could *accelerate* further (Exhibit 45). As our colleagues have noted here, the sub-components that are most sensitive to the Phillips curve are also the ones that are accelerating fastest.

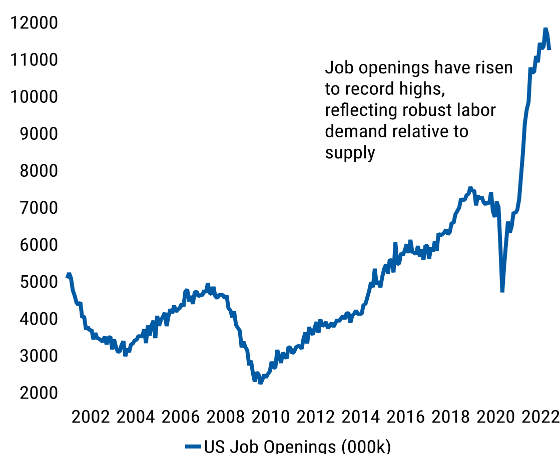
This point is critical. Fed policy operates primarily through affecting aggregate demand, and the labor market is a key transmission mechanism. A rollover in inflation driven by commodity prices or core goods, which are more affected by the whims of global supply chains and markets rather than aggregate demand, is less likely to inspire a dovish pivot than a rollover in demand-driven sub-components. And the latter shows no signs of easing; in fact, it shows signs of accelerating.

We'd argue that due to structural changes in the labor market, it's going to be increasingly difficult for the Fed to get the unemployment rate up. **Put another way, the Fed may have to tighten even more, all else equal, because of structural changes in labor supply, which restrains how high the unemployment rate can go.**

Normal economic models would tell us that a supply/demand imbalance could be rectified by a combination of changes in quantity and price. In this case, labor demand is far exceeding the supply of labor, as evident in the record high job openings figures (Exhibit 46). To reduce this labor market tightness, Fed policy tightening reduces firms' demand for labor, while rising wages should, in theory, raise the supply.

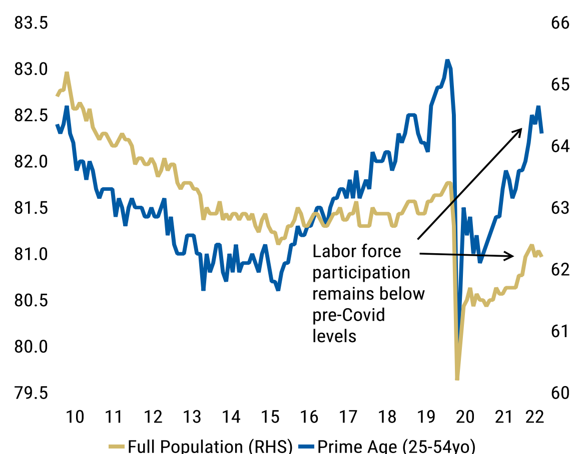
If labor supply is extremely elastic – that is, very responsive to changes in wages – then only a modest wage increase should bridge the demand/supply gap easily. Little tightening on the demand side is needed. But post-Covid, we'd argue that the supply of labor is now more *insensitive* to wages because workers are increasingly focused on non-economic factors.

**Exhibit 46:** Job openings have risen to record highs, reflecting strong labor demand....




Source: Macrobond, Morgan Stanley Research

**Exhibit 47:** ...while labor force participation remains well below pre-Covid levels, constraining labor supply




Source: Macrobond, Morgan Stanley Research

Covid has changed our psychology and, we'd argue, was the most significant economic, political, and psychological shock since WWII. This has caused workers around the world to question their life plans. As a result, people are changing locations (leaving regional labor market A for regional labor market B), changing careers (leaving job market A for job market B), or leaving the labor force entirely (for childcare, retirement, educational reasons, etc).

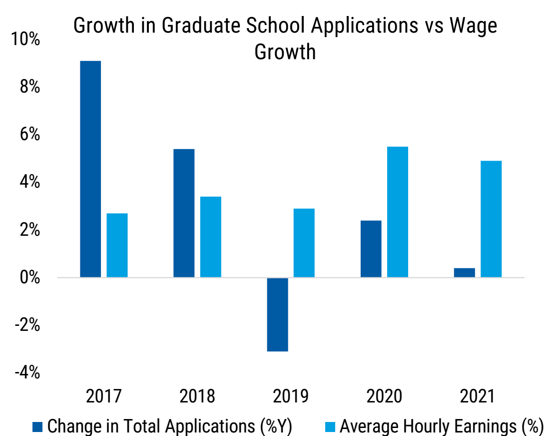
This means that workers may be less incentivized to increase labor supply for a given increase in wages because they are focused on non-monetary forces. Workers leaving for childcare reasons may find the bar to re-enter the workforce far higher. Individuals changing jobs for personal reasons are unlikely to change those plans for a modest wage increase, and. of course, the more specialized the job, the more time it takes to transition, limiting their ability to meet short-term labor market needs.

We're already seeing increasing evidence of this thesis in action. US labor force participation remains well below pre-Covid levels (Exhibit 47). Demand for graduate education is higher in 2021 than it was in 2019, when the unemployment rates were near similar levels, reflecting arguably that individuals are indeed transitioning away from one career to another despite rising wages (Exhibit 48). Mobility indicators also confirm changes in the composition of regional labor markets. Indeed, researchers at the SF Fed have concluded that short-run NAIRU is closer to 6%, rather than the 3.5-4.3% assumed by the Fed in its June SEP.

In short, this cycle, bridging the demand/supply imbalance may require labor demand destruction to do most of the heavy lifting, or meaningful (if not unprecedented) wage increases to increase supply, or perhaps both. Both of these suggest a much tighter Fed, either because more tightening is needed to quell demand, or because wage increases are so substantive, pushing up producer costs, compressing margins, and eventually feeding through to higher CPI. Either the Fed tightens enough now, or higher wages would require it to tighten more in the future.

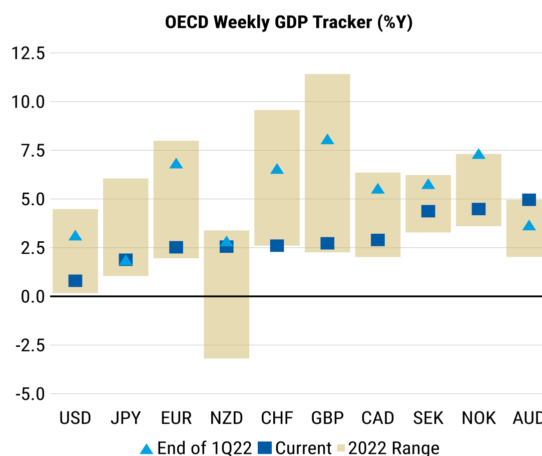
Thus we don't think Fed pricing has peaked. What about the other necessary condition, global growth expectations bottoming? We don't think we're there either.

**Exhibit 48:** Applications to post-graduate programs have been steadily rising despite higher wage growth




Source: GMAC, Bloomberg, Morgan Stanley Research

**Exhibit 49:** GDP tracking estimates have been steadily falling over 2022




Source: Macrobond, Morgan Stanley Research

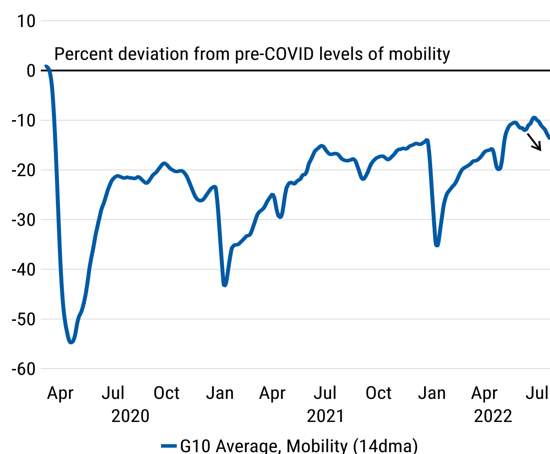
Some of these stories are regional, some global. Demand in general appears to be waning in part as a response to monetary tightening, increased economic uncertainty, and high costs. Indeed, our oil analysts recently downgraded their near-term forecasts in response to clear demand destruction from high oil prices.

Exhibit 49 shows the OECD's weekly GDP tracker for the G10 over the past calendar year. With the exception of NZD, which was still recovering from Covid-19 lockdowns, GDP tracking has been consistently falling this year closer and closer to negative. Meanwhile, mobility trackers continue to show that pre-Covid levels of mobility, a proxy for economic activity, have not been met and have even started turning lower again (Exhibit 50). Our global economists, consistent with this, don't expect global GDP to return to pre-Covid levels.

Regional challenges continue to grow. Risks to Eurozone gas shutoff continue to rise, which should weigh on local growth, while Covid-19 policies in Asia may continue to restrict the recovery. High food and fuel prices may continue to weigh on the EM economic (and political) outlook, and American data continue to soften too. The G10 economic surprise index is now back at the lowest level since 2010 if we exclude the Covid-19 crisis of early 2020 (Exhibit 51).

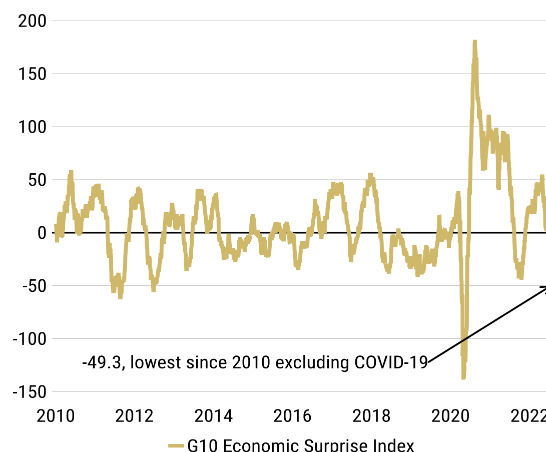
This should be positive for the USD. Indeed, for investors increasingly looking for safety, the "King Dollar" may indeed still be king. This could even be true across asset classes. Say an investor is looking for a safe haven and she is choosing between the USD in FX or a Treasury note. Both are often viewed as safe havens, but it's worth remembering that the USD has *positive* returns relative to Treasuries in a world where rates keep rising. That is, the USD is akin to a zero-duration US government bond, making it even more attractive than a positive-duration US government bond if rates continue to rise, pushing down bond prices.

**Exhibit 50:** Mobility trackers have not yet returned to pre-Covid levels, and early indications suggest further economic weakness




Source: Google, Macrobond, Morgan Stanley Research

**Exhibit 51:** Economic surprise indices are approaching 10-year lows excluding the Covid crisis




Source: Macrobond, Morgan Stanley Research

In sum, the two conditions needing to be met to see the USD turn lower appear more remote, not more probable. Inflation risks remain elevated, especially in the US, and markets are likely underestimating the Fed's resolve to tackle inflation at all costs. Meanwhile, growth prospects continue to dwindle, rendering the USD a more attractive safe port in a storm.

**Trade idea: Maintain short EUR/USD at 1.0161 with a target of 0.97 and stop of 1.05**

**Trade idea: Maintain long CHF/NOK at 10.159 with a target of 11.00 and stop of 9.800**

**Trade idea: Maintain short AUD/CAD at 0.8917 with a target of 0.8400 and a stop of 0.9000**

We maintain a bullish view on the USD, particularly versus the EUR, and continue recommending EUR/USD shorts targeting 0.97 with a 1.05 stop. EUR is the most likely currency to weaken versus the USD in the short term, in our view. Markets could be viewing this "changeover" as a respite for risk assets, limiting USD weakness versus risk-sensitive currencies. Lower US bond yields in response to market optimism (albeit misplaced) about a Fed dovish pivot may limit USD/JPY's rise. But continued weakness in local growth in Europe is likely to keep EUR under pressure, both versus the USD and perhaps on crosses too (e.g., EUR/GBP).

This respite – this changeover – should be used as a chance to re-enter USD longs, though. Investors should focus on what's coming ahead, not what just transpired.

## GBP | BoE preview: Downside risks priced in?

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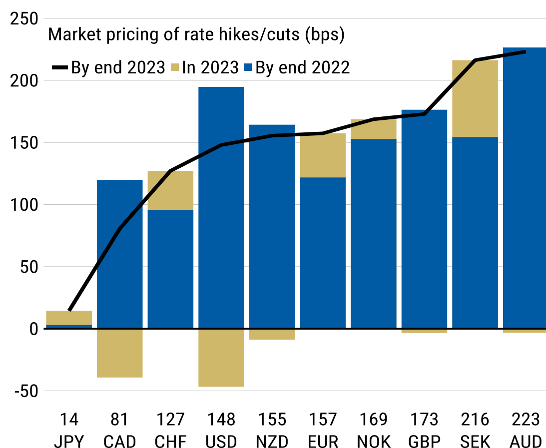
We stay neutral on GBP heading into the August BoE meeting. On the one hand, the market is pricing a high probability of consecutive 50bp hikes in the next three meetings (with 130bp worth of tightening priced in by November). Our economist sees only 25bp hikes for the rest of the year, coupled with lower growth and higher inflation forecasts. 2-year yield differentials have been an important driver of both GBP/USD (see Exhibit 54) and EUR/GBP (see Exhibit 55) over the past year, and so a smaller-than-expected hike (and dovish guidance) could see GBP moving lower in the immediate aftermath of the meeting.

That said, growth expectations have been the single most important driver of GBP performance. Our economist expects UK economic momentum to slow further, but this is already largely expected by markets – with the BoE being one of the first few G10 central banks to have warned about the risk of a recession. In fact, a lot of the negative catalysts we were looking for (including lack of additional fiscal support and renewed political uncertainty) have materialized already, leaving little to surprise the market amid already short positioning. The broad-based USD strength we expect should keep putting downward pressure on GBP/USD, but we see scope for GBP to outperform relative to its European peers – particularly if the BoE delivers a 50bp hike at the August meeting and/or markets price in an even worse outlook for the euro area economy.

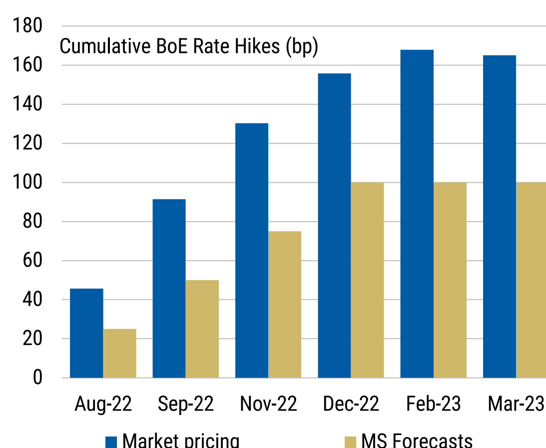
**A 25bp hike will be a downside surprise for markets...** Following the BoE's "forceful" 25bp hike in June, markets have priced not only a >90% likelihood of a 50bp hike at the upcoming August meeting, but also a high probability of a streak of 50bp hikes until November (see Exhibit 53). In this context, our economist's call for 25bp hikes for the rest of 2022 represents a clear downside surprise relative to the market, particularly if the decision is complemented by lower growth projections and relatively dovish guidance. This come as outsized rate hikes by other G10 central banks and increasing risks of a recession have made the UK rank third in the G10 in terms of future expected tightening (see Exhibit 52).

**Exhibit 52:** The UK now ranks third in the G10 in terms of future expected tightening




Source: MS STIRT Desk, Morgan Stanley Research

**Exhibit 53:** Our economist continues to expect materially fewer hikes than the market



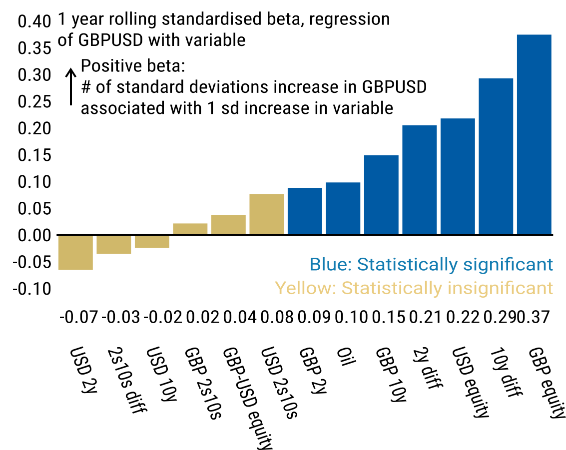

Source: Bloomberg, Morgan Stanley Research forecasts

This matters because 2-year yield differentials have been an important driver of both GBP/USD (see Exhibit 54) and EUR/GBP over the past year. That is particularly the case for EUR/GBP, which has been tracking the difference between ECB and BoE tightening expectations very closely since late May (see Exhibit 55). Thus – although admittedly a close call – our economist's expectation for a 25bp hike would lead to a knee-jerk move lower in GBP, in our view, particularly in the context of the recent upside surprises other G10 central banks have delivered (with the BoC delivering a 100bp hike and the ECB a 50bp hike).

**...but we don't think that it will weigh much on GBP:** That said, we don't think that the weakness in GBP will be meaningful or persistent for a number of reasons. For one, we don't think that a smaller hike will be accompanied by a change in the BoE's reaction function. Our economist expects a 6:3 vote for such a hike, with three members voting for a 50bp move (see our detailed preview Why Now versus Why Not? for more). The forward guidance (with "forceful action" if needed to counter signs of persistence in inflation) should also remain unchanged in the statement, leaving the room open for a larger hike later if needed.

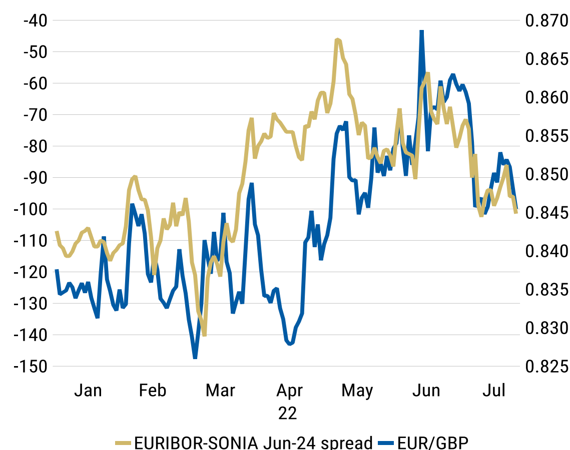
**Growth to slow meaningfully, but is it all priced in?** Second, UK growth expectations have also been a very important driver of GBP performance. While our economist expects UK economic momentum to slow further, this is already largely expected by markets – the BoE was in fact one of the first few G10 central banks to have warned about the risk of a recession. A lot of the negative catalysts we were looking for (including lack of additional fiscal support until the autumn and renewed political uncertainty) have also played out already, and a 25bp hike would give yet another signal to the market that – unlike other central banks – the BoE is doing its best to safeguard future growth amid an increasing likelihood of a global recession.

**Exhibit 54:** 2-year yield differentials have been an important driver of GBP/USD, alongside broader risk sentiment




Source: Bloomberg, Morgan Stanley Research

**Exhibit 55:** EUR/GBP has also been tracking BoE-ECB rate hike expectations closely since late May

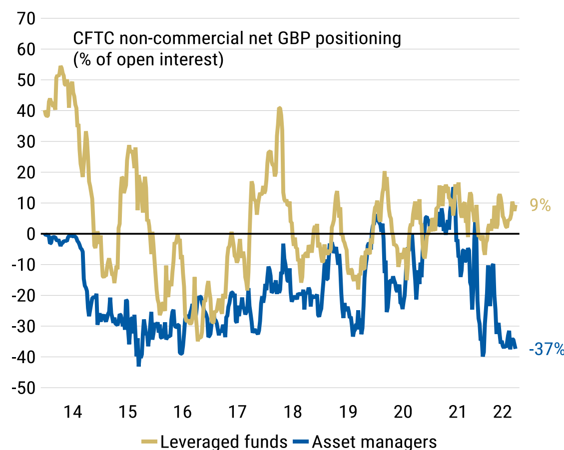



Source: Bloomberg, Morgan Stanley Research

**Positioning remains short GBP, limiting the downside:** Last but not least, positioning in GBP is already flagging as substantially short across a number of our indicators. As we noted in our last FX positioning tracker, GBP features as one of the largest short positions when looking at our overall FX positioning scorecard. GBP shorts have remained firmly in place in the futures market, with asset managers more short GBP than any other currency in the G10 and their short exposure close to historical highs (see Exhibit 56). In the options market too (see Exhibit 57), positioning remains short GBP, particularly against EUR and despite the broad-based EUR weakness seen recently. This suggests that a lot of the downside risks are already priced in for GBP.

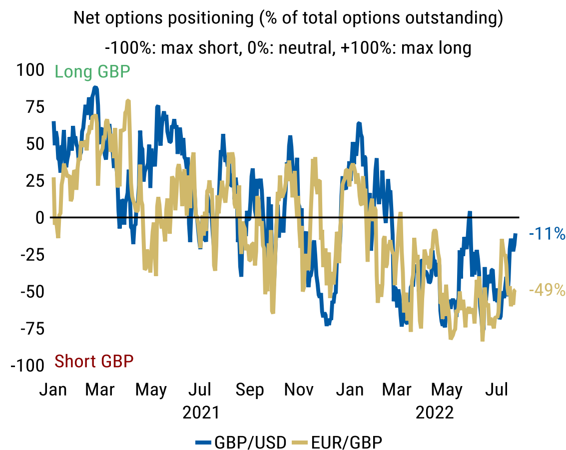
**GBP/USD remains a USD and risk story...** We thus maintain our neutral stance on GBP heading into the decision. We think that GBP/USD should continue to trend lower, but this is largely a function of the broad-based USD strength we expect than any idiosyncratic GBP factors. The risk backdrop and USD have been key drivers of the broader G10 FX moves recently, and we expect this to continue.

**Exhibit 56:** Asset managers are close to peak short GBP in the futures market...




Source: Macrobond, Morgan Stanley Research

**Exhibit 57:** ...with the FX options market similarly short GBP, particularly against EUR




Source: DTCC, Bloomberg, Morgan Stanley Research; Note: Using options that were traded in the past three months and expire in the coming one month. Notionals are delta-adjusted. Data as of July 15, 2022. For methodology, see Assessing FX Positioning with Currency Options.

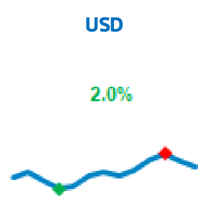
**...while EUR/GBP risks are to the downside:** On the crosses though, we do see scope for GBP to outperform relative to its European peers. As discussed above, we think that the market has largely internalized a lot of the downside risks for GBP, leaving little scope for new surprises in the near term amid also already short positioning. Coupled with the clear downside risks the euro area is facing (a technical recession, Italian political uncertainty and additional gas cutoffs), we think that EUR/GBP is likely to continue to move lower from here, eventually retesting the lows around 0.82-0.83.

**What would be a hawkish surprise and how does GBP react?** Should the BoE deliver a 50bp hike, the focus will be on the language, i.e., whether it is portrayed as largely a one-off (like Norges Bank did back in June) or suggests that rate hikes of similar magnitude are likely if the inflation outlook warrants. The more the BoE's rhetoric validates current market pricing, the more it is likely to be supportive for GBP. Our focus will be more on EUR/GBP than GBP/USD given the sensitivity to 2-year rate differentials we highlighted (see Exhibit 55), the more stretched short GBP positioning on that cross (see Exhibit 57) and our expectation for additional EUR weakness to come.

# G10 | Currency Summary

**USD**

2.0%



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

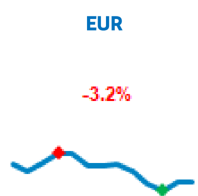
*Watch: ISM Manufacturing, ISM Services, Jobless Claims, NFP*

*DXY* **Support:** 105.75, 103.75, 102.75, 101.25, **Resistance:** 107.25/50, 108.75/109.00/109.25

We maintain our bullish USD view and think this is best expressed via EUR/USD shorts targeting 0.97 (1.05 stop). This week's FOMC meeting was seen by many as dovish, but we think markets may be getting complacent about the Fed's willingness to tighten to quell inflation even despite softer growth. Structural limits on labor supply and a NAIRU estimated to be 2.5pp above current levels (6% versus 3.6% or so now) suggest that Fed tightening will be needed to quell labor demand meaningfully. Meanwhile markets are pricing in a fed funds rate 100bp below the Fed's median 'dot' from June. The most likely catalyst to kick off the next leg of the USD rally is high CPI on August 10th.

**EUR**

-3.2%



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

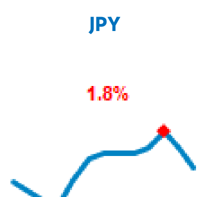
*Watch: Unemployment, PPI, Retail Sales*

*EUR/USD* **Support:** 1.0000, 98.75/99.00, 97.00/25, 96.00, **Resistance:** 1.0275, 103.75, 105.00, 1.0600, 1.0650

We remain bearish on EUR/USD targeting 0.97 (1.05 stop). Eurozone growth data continue to appear challenged, particularly consumption, as high prices and sticky wages are seeing real disposable incomes fall. High natural gas prices and ongoing political uncertainty (e.g., Italian elections forthcoming) should keep investors cautious about the Eurozone.

**JPY**

1.8%



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

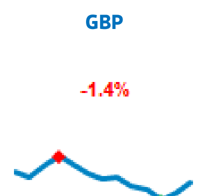
*Watch: Wage Growth, Weekly Mof Data*

*USD/JPY* **Support:** 132.50/75, 132.00, 130.50, 129.50, **Resistance:** 134.50, 135.75, 137.50, 139.00, 139.50

We retain our bearish skew for JPY despite the strong JPY outperformance this week. The July FOMC outcome seems to have been interpreted as dovish, and markets pricing in a lower US terminal rate dragged USD/JPY lower. What surprised us was that JPY also outperformed against broader currencies, with a sudden CCY/JPY sell-off seen during Tokyo hours. There might be some month-end rebalancing flows amid poor liquidity, and a sharp retracement of CCY/JPY might invoke liquidation of long CCY/JPY positions from fast money /model-driven investors. That said, with the equity market more buoyant across sectors on the back of the recovery in risk sentiment, we don't think that such sharp JPY appreciation will last for long. Given the benign financial conditions and a modest recovery in energy prices, we see opportunity to fade the recent JPY strength, particularly against energy exporters' currencies. We also see room for the US terminal rates to reprice higher once we confirm another strong inflation print, despite weak US economic data.

**GBP**

-1.4%



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

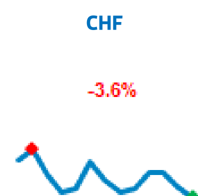
*Watch: BoE Rates Decision, Final PMIs, House Prices*

*GBP/USD* **Support:** 1.1925, 1.1800, 1.1700, 1.1650, **Resistance:** 1.2200, 1.2300, 1.2400, 1.2475

We stay neutral on GBP into the August BoE meeting. The market is pricing a high probability of consecutive 50bp hikes in the next three meetings, while our economist sees only 25bp hikes being delivered. 2-year yield differentials have been an important driver of both GBP/USD and EUR/GBP over the past year, and so a smaller-than-expected hike could lead to a knee-jerk move lower in GBP through its impact on 2y yield differentials. Already-short GBP positioning coupled with a lot of downside risks already in the price mean that GBP should outperform relative to its European peers, in our view – particularly if markets price in an even grimmer outlook for the euro area economy. We expect EUR/GBP to retest the lows ~0.82-0.83

**CHF**

-3.6%



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

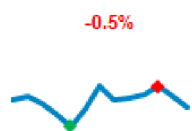
*Watch: Sight Deposits, Inflation, FX Reserves*

*EUR/CHF* **Support:** 0.9700, 0.9350, 0.9000, 0.8500/25, **Resistance:** 0.9800, 0.9950, 1.0000, 1.0150

We remain bullish on CHF and long CHF/NOK. EUR/CHF reached new lows this week as EUR crosses continued to be sold aggressively. We think fundamental factors continue to point to further CHF strength as long as the SNB persists with its preference for a stronger currency to curb imported inflation. Euro area growth expectations – a key driver of EUR/CHF – continue to deteriorate as Russian gas flows are getting further reduced, and recessionary concerns are rising, pointing to inflows for safe-haven currencies like CHF. Short positioning in EUR/CHF is again at stretched levels, which may again warrant some near-term consolidation. Over time though, we continue to see the cross moving lower to 0.95. USD/CHF should remain driven by the broader USD trend.

**CAD**

-0.5%



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

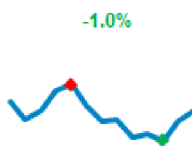
*Watch: Building Permits, Employment*

*USD/CAD* **Support:** 1.2775, 1.2625, 1.2525, 1.2475, **Resistance:** 1.2825/50, 1.2950, 1.3125/75, 1.3350, 1.3425

We continue to like CAD longs versus other high beta currencies like AUD. The BoC has maintained its hawkish bias and higher US rates should keep Canadian rates supported too, bolstering the currency. Resiliency in energy prices should also be CAD positive. Next week's employment data will be an important watchpoint as investors gauge whether 50bp or 75bp is more likely at the September BoC meeting.

**AUD**

-1.0%



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

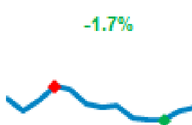
*Watch: RBA Decision, Trade Balance, Statement of Monetary Policy*

*AUD/USD* **Support:** 0.6875, 0.6700, 0.6550/75, 0.6500, **Resistance:** 0.7075, 0.7150, 0.7275, 0.7350

We remain bearish on AUD relative to other high beta currencies like CAD. Australian CPI this week surprised to the downside, a rare miss in a world of high inflation, which may limit increases in market pricing for the RBA. Our economists expect a 50bp hike from the RBA this week. AUD remains primarily sensitive to the global risk backdrop, though, which we believe will remain challenged amid slowing growth, more cautious earnings estimates, and higher rates.

**NZD**

-1.7%



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

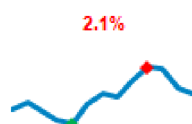
*Watch: Building Permits, Unemployment Rate*

*AUD/NZD* **Support:** 1.0925/75, 1.0850/75, 1.0750, 1.0625, **Resistance:** 1.1150/75, 1.1200, 1.1300, 1.1350

We continue to maintain a bearish skew on NZD given challenges to the global growth and risk outlook and a slowing of local data. New Zealand house price appreciation continues to slow as macroprudential policy and RBNZ tightening restrict demand. Risks appear to be rising that the RBNZ may be 'overtightening', and its penchant to change course quickly suggests that rate cuts in 2023 may be rising even despite firming inflation. We continue to see 1s5s flatteners as appropriate given this risk, though we may consider shortening the tenor of our paid position if data soften further, raising the risk of earlier rate cuts to be priced in by the market.

**SEK**

2.1%



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

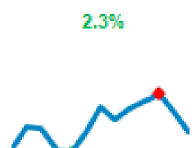
*Watch: Manufacturing PMI, Services PMI*

*EUR/SEK* **Support:** 10.34, 10.22/24, 10.12, 10.08, **Resistance:** 10.47, 10.55, 10.64, 10.72/73, 10.74

We continue to see risks skewed to the downside for SEK. The move higher in NOK/SEK allowed EUR/SEK to trade sideways during the past week, despite the weakness seen in EUR crosses and the improving risk sentiment. Sweden GDP data were much stronger than expected in 2Q but consumer confidence reached yet another all-time low. A deeper euro area contraction should weigh disproportionately on Sweden due to its high trade dependence to the bloc and lack of support from energy prices. The risk outlook remains a key driver of SEK, and our equity strategists continue to see more weakness to come, with the S&P 500 trading toward 3400-3500 in the coming months.

**NOK**

2.3%



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

*Watch: OPEC+, Manufacturing PMI*

*NOK/SEK* **Support:** 1.0250, 1.0125/50, 1.0000, 0.9925, **Resistance:** 1.0525/75, 1.0650/75, 1.0875, 1.0975

We remain bearish on NOK and long CHF/NOK. Just as equity market weakness led to an abrupt NOK sell-off from the mid-April highs, the recent leg higher in risk assets - coupled with broad-based EUR weakness and higher gas prices - has pushed EUR/NOK well below the 10.00 level. Fundamental factors remain supportive of the currency in our view, but risk sentiment should remain the main driver. While the recent dovish rhetoric from the Fed could support risk assets in the very near term, our equity strategists' view for a new leg lower remain unchanged. Our commodity strategists also recently lowered their oil forecasts to around current levels, limiting the upside for NOK through that channel. Lastly, EUR/NOK is now flagging as oversold in the 14-day RSI, suggesting a slowing in downside momentum in the near term. We thus maintain our cautious bias on the currency.

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**

Wednesday's FOMC meeting drove price action on the week. Markets signaled that the 75bp outcome, and Chairman Powell's press conference in particular, were dovish surprises. Inflation markets were no exception, with 5y breakevens breaking out of the range they had been trading in since late June.

Our main inflation trade recommendation is going long 1y1y US Inflation, to capture sticky prices. This week, we converted the 1y1y play into TIPS BE space for investors who can't trade swaps, and recommend long July '24 TIPS BE vs. short July '23 TIPS BE. We balance signals from our BE vs. Inflation swaps and seasonal breakevens models, which give an edge to the July BEs pair, against Iota spreads, which point toward the April BEs. Ultimately, we settle on the July BEs expression of 1y1y.

Shelter prices have provided a solid foundation for inflation and will be central to the Fed's ability to bring CPI back under control. Amid equity REITs' earning calls, we updated our shelter inflation model to see what shelter might look like going forward.

Using the most recently available data, our model sees shelter inflation going toward ~6.0% by the end of the quarter, before dropping to 5.5% into year end. This move is strongly driven by a drop in Costar effective rent data, indicating that "real time" rents are decelerating. It is also aided by a weakening in our econometric model, as the business cycle starts to show signs of slowing.

We analyze what this might mean for inflation, and we recommend caution in interpreting the result as showing decreased persistence in inflation. We also take a look at whether our macro model is matching up with what apartment REITs are saying.

**Japan**

We discuss the upcoming JGBi auction preview which is held on August 4. The issuance amount is set to be a ¥250 billion, a ¥50 billion increase in the quarterly issuance amount from the previous auction. We see little prospect of the ¥50 billion hike in issuance posing any real problems for market absorption.

We see BEI staying firm given the positive inflation carry, still-elevated energy prices, and the possibility of a further improvement in global risk sentiment now that the Fed has adopted a less entirely hawkish tone. That said, JBI27 does currently look rich from a valuation perspective, suggesting that cheaper issues such as JBI26 and JBI24 might be a better option provided that dealers can offer adequate inventory. We also discuss 10y BEI fair value based on the fundamental changes, and why there has been notable divergence between the actual value

and model output.

## United States | Eight handles on eight handles

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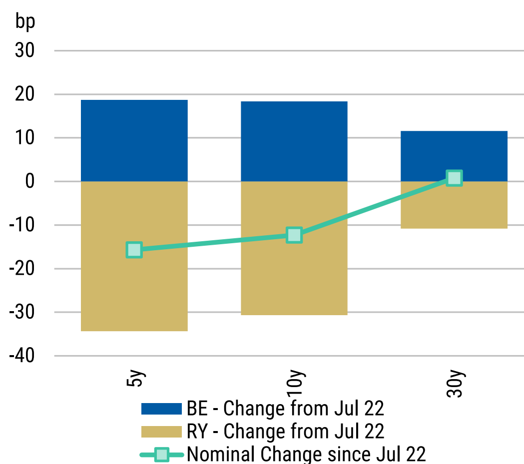
Wednesday's FOMC meeting drove price action on the week. Markets signaled that the 75bp outcome, and Chairman Powell's press conference in particular, were dovish surprises. Inflation markets were no exception, with 5y breakevens breaking out of the range they had been trading in since late June. The 5y point ended the week up ~20bp, driven by a ~34bp rally in TIPS, which more than outpaced a "moderate" ~16bp drop in nominal yields.

Fixings markets also displayed increased concerns about the inflation-taming power of the Fed's current policy strategy. Zero coupon inflation swaps pricing saw 15-25bp increases in the y/y NSA pricing of the eleven CPI releases from August '22-July '23 (see Exhibit 59). **The fixings market now sees eight-handle releases for the next four CPI releases and does not anticipate the index dropping below 7% y/y NSA in 2022.**

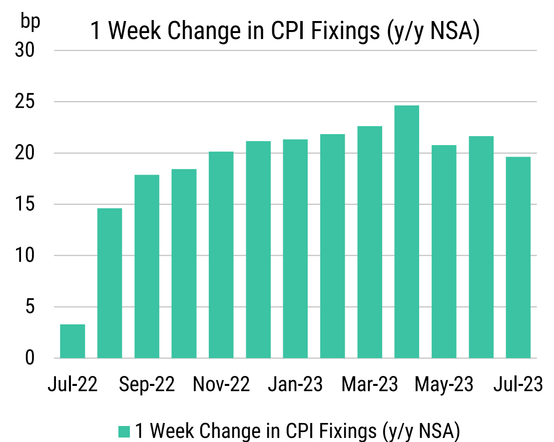
With the Fed's focus marginally tilting towards growth and marginally away from spot inflation, we feel further bolstered in playing for sticky inflation by buying the 1y1y forward rate. Our preferred instruments are still zero coupon inflation swaps (selling the 1y swap, buying the 2y swap), but we also recommend this trade in BE space by going long July '24 TIPS BE vs. short July '23 TIPS (see below for more detail).

**Exhibit 58:** Move in UST, RY, and BE over the week




Source: Bloomberg, Morgan Stanley Research

**Exhibit 59:** 5y breakeven range




Source: Bloomberg, Morgan Stanley Research

## Long 1y1y Swaps – TIPS Edition

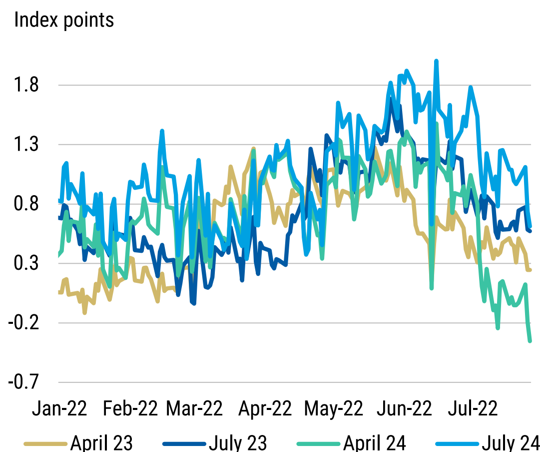
Our main inflation trade recommendation is going long 1y1y US Inflation, to capture sticky prices. Our preferred instruments are zero coupon inflation swaps, which enable investors to target specific CPI releases and specific CPI index levels. Due to mandate constraints, certain investors do not have access to this market. **We therefore converted the 1y1y play into TIPS BE space, and we recommend long July '24 TIPS BE vs. short July '23 TIPS BE.**

Due to the 1y1y forward target, we considered shorting '23 vs. long '24 TIPS BE. We decided to only consider matched-month BEs to reduce the impact of seasonality differences. This limited the set of comparisons to the April vs. July 1y1y BE combinations. We used three relative value techniques to analyze these pairings, namely: (1) implied terminal BE CPI index levels against CPI fixings, (2) seasonally adjusted breakevens, and (3) cheapness in Iota.

CPI swaps and BE both provide a signal of inflation over a given time period, which can be used to back out implied-terminal CPI levels. When the swaps terminal CPI is above the BE's terminal CPI, the TIPS contract is trading "cheap" compared to the inflation swap, since it has a lower terminal CPI to breakeven. Conversely, a tight spread signals that the TIPS BE is trading "rich" to the inflation swap.

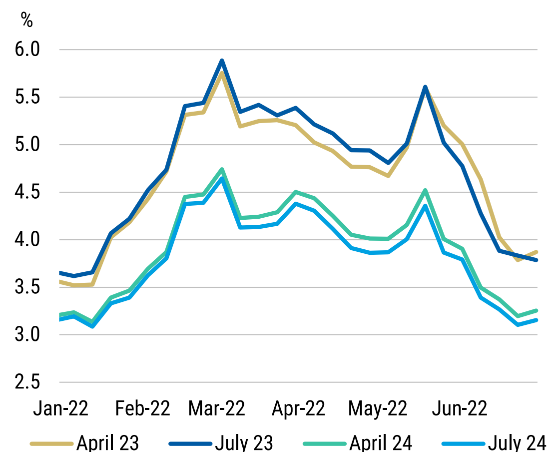
We updated our implied terminal-CPI model and show the results in Exhibit 60. We find that the July BEs are trading cheap relative to the associated CPI swaps. The April '24 BE is trading rich compared to the swaps, requiring an additional ~0.4 index points to break even. From this end, we see value in the July BEs, since this allows investors to avoid buying this "rich" point.

**Exhibit 60:** Terminal CPI spread model (Swaps - BE)




Source: Bloomberg, Morgan Stanley Research

**Exhibit 61:** Seasonally adjusted breakevens

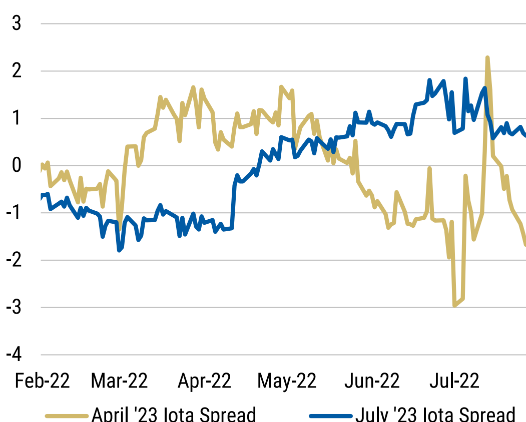



Source: Bloomberg, Morgan Stanley Research

Next, we looked at the BEs implied by the four TIPS contracts. To avoid seasonality complications, we used our seasonally adjusted breakeven inflation model. Using this model, we see that the '23 contracts are trading very close, whereas the April '24 has higher inflation expectations embedded vs. the July '24. We therefore view the July BE as having a slight advantage on this front.

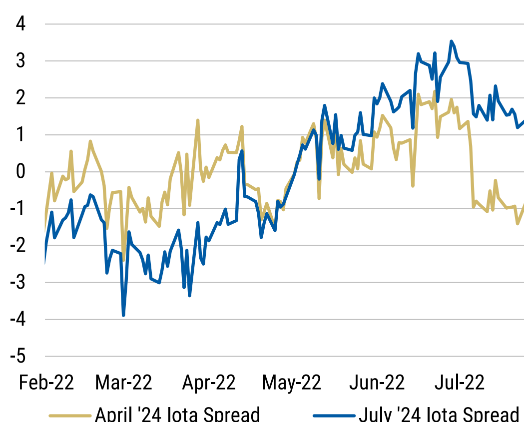
We finally turned to looking at the breakevens' Iota spreads, a measure of BE pricing relative to the swaps curve. We find that the April BEs are trading rich on a 6m z-score basis and that the July BEs are trading slightly cheap/fair to close value (see Exhibit 62 and Exhibit 63). The spreads are therefore a mixed bag, though we note that the July '23 spread has been structurally cheap, suggesting it could remain cheap, and therefore have a slight bias toward the April BEs.

**Exhibit 62:** '23 BE Iota spreads (6m z-score)




Source: Bloomberg, Morgan Stanley Research

**Exhibit 63:** '24 BE Iota spreads (6m z-score)




Source: Bloomberg, Morgan Stanley Research

We balance inflation swaps pricing and seasonal breakevens that give a slight edge to the July BEs pair, against Iota spreads that point toward the April BEs. Ultimately, we recommend the July BEs expression of 1y1y for investors who do not have access to the inflation swaps market.

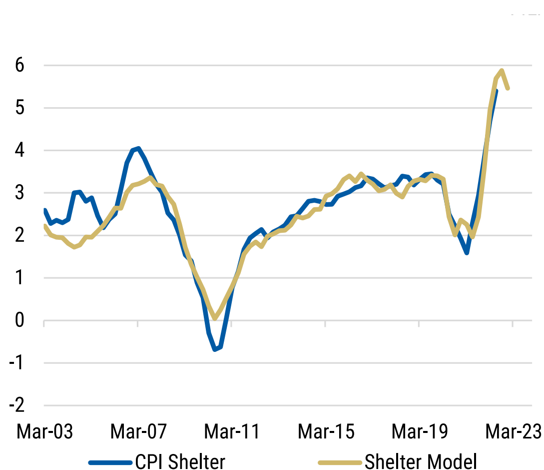
### Shelter Peaking? Not So Quickly

Shelter prices have provided a solid foundation for inflation and will be central to the Fed's ability to bring CPI back under control. Last year, we introduced our shelter inflation model, which has been a great guidepost for the path of shelter inflation. Amid earning calls from equity REITs, we updated the model to see what shelter might look like going forward.

Our model forecasts quarterly shelter inflation, using variables at a 2-3 quarter lag (see Exhibit 64). The overall model is a rolling regression of two separate components: (1) an econometric model, using economic slack, home price values, and vacancy rates, and (2) a high frequency "Costar" model, which uses Costar effective rent data to capture faster variations in shelter prices.

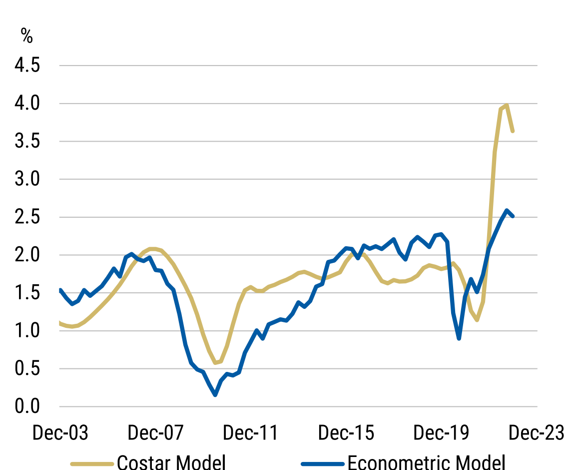
In turn, the econometric and Costar models are split into two sub-models. These sub-models aim to forecast Shelter A and Shelter B inflation separately, reaggregating using the BLS's weights. Shelter A inflation pertains to inflation in cities with >2.5M inhabitants, while Shelter B measures shelter inflation in towns with <2.5M.

**Exhibit 64:** Shelter model until 22Q4




Source: Bloomberg, Costar, Morgan Stanley Research

**Exhibit 65:** Econometric and Costar model contributions




Source: Bloomberg, Costar, Morgan Stanley Research

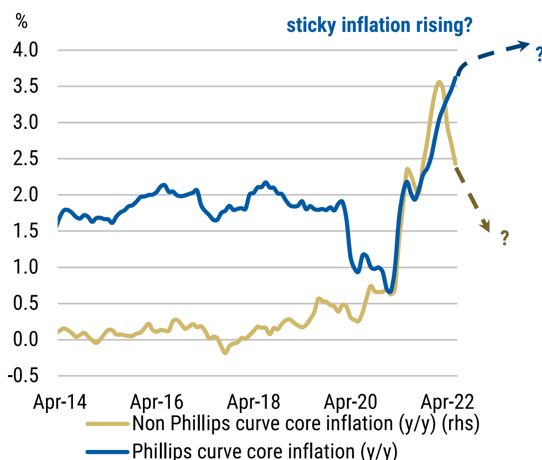
Using the most recently available data, our model sees shelter inflation going toward ~6.0% by the end of the quarter, before dropping to 5.5% into year end. This move is driven heavily by a drop in Costar effective rent data, indicating that "real time" rents are decelerating. It is also aided by a weakening in our econometric model, as the business cycle starts to show signs of slowing (see Exhibit 65).

**Is this the beginning of the end for persistent inflation? We do not believe so, and continue to view shelter inflation as a solid base for sticky inflation.** Shelter inflation is an example of a Phillips-curve sensitive CPI component, i.e., it is closely linked to the strength of the labor market (see Exhibit 66). Phillips curve components tend to be slow moving, and can remain elevated well into this cycle. Put this together with the model-implied 6% – a 30y high – and we think shelter inflation will be a major contributor to sticky inflation.

To add some further perspective, we backed out the model-implied m/m path for shelter inflation. The model sees an average 0.4% m/m NSA and -0.1% m/m NSA readings during 3Q and 4Q of this year – in SA terms, 0.4% m/m and 0.0%. This means that shelter could provide ~10-20bp in support to m/m SA Core CPI over coming months and no downwards pressure in following months.

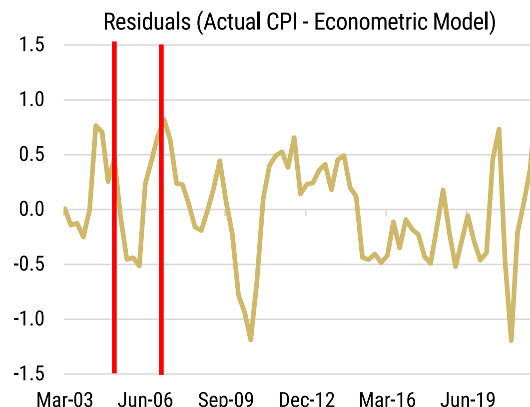
During the previous aggressive rate hiking cycle, 2004-2006, our econometric model under-estimated actual shelter CPI. Exhibit 67 shows that our model's residuals trended upwards during 2004-2006. Applied to the present cycle, this means our model could be underestimating realized shelter inflation by up to 0.6%. **In other words, the 6% peak could turn out to be a 6.6% observation on the way to higher peaks.** This could partially be explained by elevated mortgages making home ownership more expensive, increasing the demand for rents (for more, see here).

**Exhibit 66:** Phillips curve-sensitive inflation since April 2014




Source: Bloomberg, Morgan Stanley Research

**Exhibit 67:** Model residuals during 2015-2018 rate hiking cycle




Source: Bloomberg, Morgan Stanley Research

To see whether our macro model is consistent with more micro-data, we took a look at apartment REITs' 2Q earnings. United Dominion Realty (UDR), Equity Residential (EQR), and Essex Property (ESS) all saw leases accelerating 2Q vs. 1Q. EQR and ESS released July-QTD estimates, which saw blended leases come in at 12.9% (2Q: 14.8%) and 11.8% (2Q: 15.4%) respectively. This points to a deceleration on a y/y basis – consistent with our model – however, in part stemming from base effects.

**Trade idea: Enter Long July '24 TIPS BE vs. short July '23 TIPS BE at 281bp**
**Trade idea: Maintain long 1y1y US CPI Swaps**

## Japan | Previewing the August 4 JGBi auction

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Tuesday's JGBi auction is set to be a roughly ¥250 billion reopening of JBI27 following a ¥50 billion increase in the quarterly issuance amount. Issuance had been cut sharply during the early stages of the pandemic as demand dropped away, but market participants have more recently been pushing for "normalization" as global inflation continues to quicken and domestic inflation also shows signs of taking off in a potentially sustainable fashion. See Exhibit 68 for details of the upcoming offering.

### Overall assessment

We see little prospect of the ¥50 billion hike in issuance posing any real problems for market absorption. As we discuss below, we see BEI staying firm given the positive inflation carry, still-elevated energy prices, and the possibility of a further improvement in global risk sentiment now that the Fed has adopted a less entirely hawkish tone. That said, JBI27 does currently look rich from a valuation perspective, suggesting that cheaper issues, such as JBI26 and JBI24, might be a better option provided that dealers can offer adequate inventory.

### Valuations

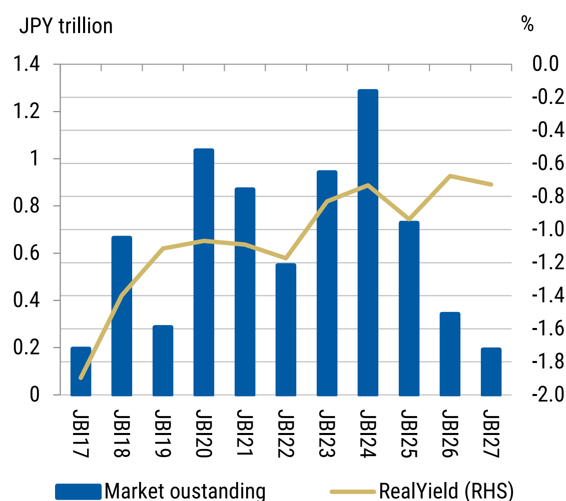
The BEI (breakeven inflation rate) might not be all that useful in assessing the richness or cheapness of JBI27 given that pricing of the relevant nominal JGB (JB366) has been so severely distorted by the combination of BoJ bond-buying operations and overseas short-covering. The real yield curve meanwhile suggests that tighter supply/demand (market scarcity) is causing JBI27 to trade at a premium to its immediate predecessor (see Exhibit 69). A pre-auction "concession" could of course bring JBI27 back to more palatable price levels, but we would otherwise favor JBI26 and/or JBI24 if looking to go long.

**Exhibit 68:** August 4 JGBi auction detail

| JGBi Aution Detail | |
|---|---|
| **Delivery Date** | 5th-August 2022 |
| **Issue** | JBI 27 |
| **Maturity** | 10th-Mar-2032 |
| **Reference l JGB** | JB366 |
| **Reference CPI** | 101.568 |
| **Issuance Amount** | JPY 250bn |
| **Indexation Coefficient** | 1.01568 |
| **Auction Type** | Dutch |

Source: Japan Mof, Morgan Stanley Research

**Exhibit 69:** JPY Real yield curve and JGBi market outstanding (ex BoJ holding/Mof Buyback)

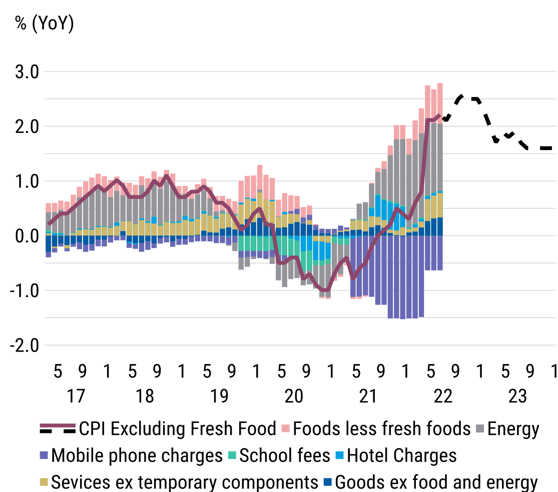



Source: Morgan Stanley Research, Japan Mof

### Inflation carry

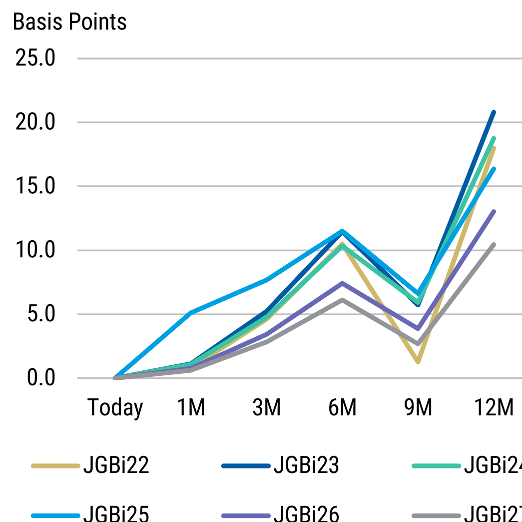
Our economists have recently upped their CPI forecasts in response to continued JPY weakness and an apparent strengthening of household inflation expectations, and now expect core inflation (all items less fresh foods) to remain above +2% for at least the time being (see Exhibit 70). These updated forecasts point to positive inflation carry on JGB linkers over a one-year horizon (see Exhibit 71).

**Exhibit 70:** MS Japan CPI ex fresh food outlook (y/y)




Source: Morgan Stanley Research, Bloomberg

**Exhibit 71:** Estimated positive carry based on MS CPI outlook




Source: Morgan Stanley Research, Bloomberg

## Some support for real yields?

Real yields look likely to receive greater support than elsewhere as the BoJ continues to enforce its "yield curve control" (YCC) framework, with the existence of a 25bp ceiling over the 10y nominal yield meaning that a rise in the inflation expectation will tend to drive down real yields. BoJ Deputy Governor Masayoshi Amamiya alluded to this in a July 28 speech:

> *Japan's long-term interest rates have remained at extremely low levels, even amid strong upward pressure from abroad on the interest rates. Since Japan's nominal long-term interest rates have remained low while people's inflation expectations have risen, real interest rates, calculated by subtracting inflation expectations from nominal interest rates, appear to have declined recently.*

Amamiya also stressed that the BoJ intends to remain in easing mode until it sees signs that the +2% "price stability goal" might be achievable on a sustainable and stable basis:

> *(...) given that achievement of the price stability target of 2 percent in a sustainable and stable manner is not yet envisaged, as shown in the latest Outlook Report, and that there are high uncertainties surrounding wage developments, it is necessary for the Bank to continue with monetary easing steadfastly.*

Exogenous conditions have also started to look more favorable for real yields, with the FOMC this week expressing confidence that its monetary tightening is beginning to have its intended impact on the real economy and hinting that a more gradual pace of rate hikes might be justifiable from this point forward.

This apparent backdown on the part of the previously hawkish Fed has triggered a decline in US real yields (accompanied by higher BEI and lower nominal yield) that has in turn been welcomed by the stockmarket.As we shall discuss below, the long-term (10y) BEI level tends to reflect not only short-term inflationary pressures such as rising commodity prices, but also the waxing and waning of general risk sentiment. In any case, the combination of a positive global risk sentiment and continued BoJ easing does look likely to provide at least some support for JPY real yields.

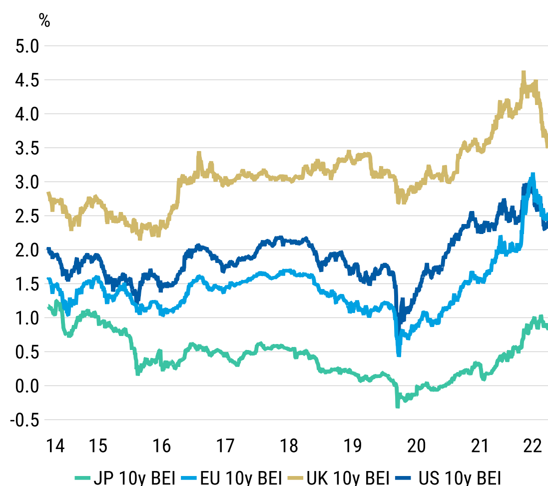
## Why actual BEI remains cheap compared with what what fundamental factors are suggesting

The BEI priced into JGB linkers typically moves in reasonably close tandem with overseas BEIs (see Exhibit 72), although it can occasionally be distorted by supply/demand factors in the nominal JGB and JGBi markets given that it is expressed in terms of a synthetic position in both markets.

As alluded to earlier, the long-term (10y) BEI will tend to reflect not only short-term inflation drivers such as the trajectory of commodity prices, but also any fluctuations in global risk sentiment that appear capable of influencing longer-run inflation expectations.

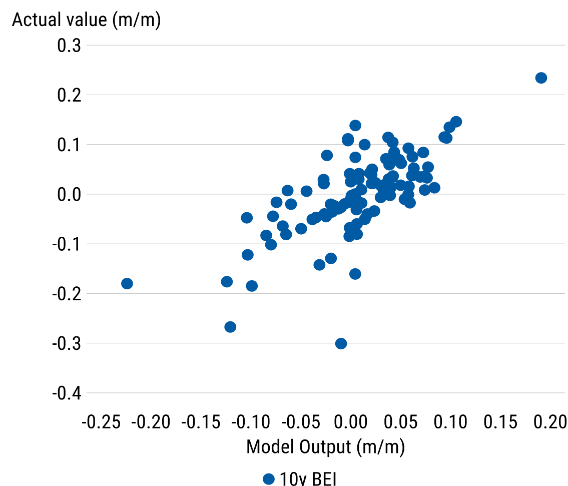
As outlined below, our regression model explaining the monthly fluctuation in the 10y JGBi BEI in terms of the monthly performance of US cyclical stocks (a proxy for risk sentiment), the monthly change in JPY-denominated energy prices (a major driver of domestic inflation), and the monthly change in the Japan style core CPI (all items less fresh food) turns out to have explanatory power of around 50% (see Exhibit 8 ).

**Exhibit 72:** Global 10y BEI development




Source: Morgan Stanley Research, Bloomberg

**Exhibit 73:** Actual 10y BEI m/m changes vs Model output (m/m changes)




Source: Morgan Stanley Research, Bloomberg,
Note: Monthly data were used for regression using the period from Oct-2013 to Jun-2022

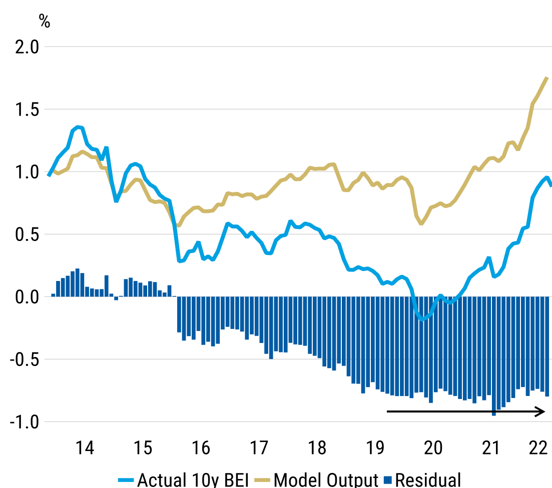
The 10y BEI is currently almost 80bp cheap to its theoretically "fair" value as estimated by our regression model (see Exhibit 74), but we see little prospect of this apparent anomaly being corrected any time soon.

The gap between our regression-based estimate and the actual BEI first started to widen sharply in early 2016 as a steep decline in oil prices during 2015 caused investors who had previously placed faith in the reflationary power of "Abenomics" (by buying JGB linkers) to start cutting their losses. Despite the increasing value of the embedded deflation floor, actual BEI sold off more than what the fundamental factors suggested.

The MoF and BoJ then launched a concerted effort to improve the overall supply/demand balance by hiking their buyback and purchase amounts, but the BEI only continued to drift yet further away from its theoretically "fair" level (as implied by the aforementioned exogenous variables) as the JGBi market continued to grow without any obvious expansion of its investor base.

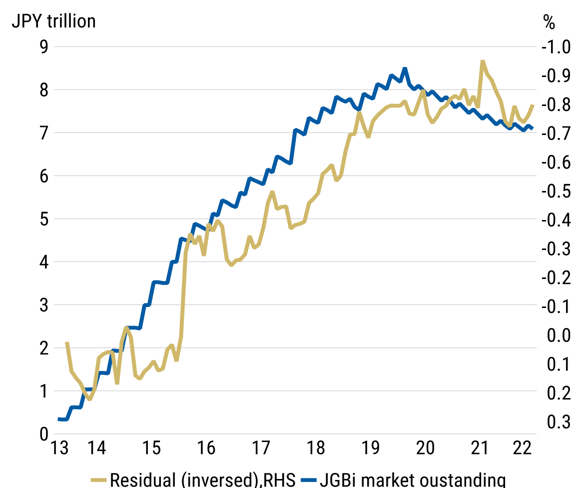
The gap between "fair" and actual BEI levels finally stopped widening in 2020, which appears to have reflected a sharp reduction in JGBi issuance as the MoF looked to address a pandemic-driven decline in the CPI and the associated drop in demand for linkers (see Exhibit 75).

**Exhibit 74:** Actual 10y BEI movement vs Model output, and their cumulative residual (Actual value - Model value)




Source: Morgan Stanley Research, Bloomberg

**Exhibit 75:** The cumulative residual vs JGBi market outstanding (excluding BoJ purchases and MoF buybacks)




Source: Morgan Stanley Research, Bloomberg, Note: The market outstanding only consider the amount of new linkers with a deflation floor

JGBi market liquidity does of course still leave something to be desired, but supply/demand has perhaps now tightened up sufficiently to make economic fundamentals more of a factor. That said, with JGBi issuance now in the process of being "normalized", we would not be surprised if the BEI were to once again grow relatively insensitive to changes in fundamentals (due to a renewed sense of "oversupply").

We expect the JGBi BEI to hold its own in the near term with support from still-elevated energy prices and a Fed-driven improvement in global risk sentiment, but gains might very well end up being less than appears warranted by fundamentals if increased issuance does indeed cause supply/demand to slacken once again.

We therefore suggest favoring cheaper issues within the JGBi space—which could stand to richen as a consequence of future BoJ purchases and MoF buybacks—if looking to build new long positions.

# Short-Duration Strategy

**United States**

We continue to see T-bills cheapen vs. OIS prior to the FOMC meeting and richen after the risk event. With the next FOMC being 8 weeks out, this dynamic could persist in the near term, making T-bills likely to be well bid over the coming weeks. However, 1m T-bills vs. OIS have lagged longer tenors since the July FOMC.

By comparing the relative performance of 1m and 3m T-bills to rates volatility, we find that investors favor the longer tenor when uncertainty is declining. Given that the Fed removed any firm forward guidance and left the door open to either 50bp or 75bp for September pending upcoming data, relative demand for 1m T-bills could increase if data challenges current market pricing. Price action so far suggests that investors could be less uncertain about future hikes vs. prior FOMC meetings.

## United States | The waiting game

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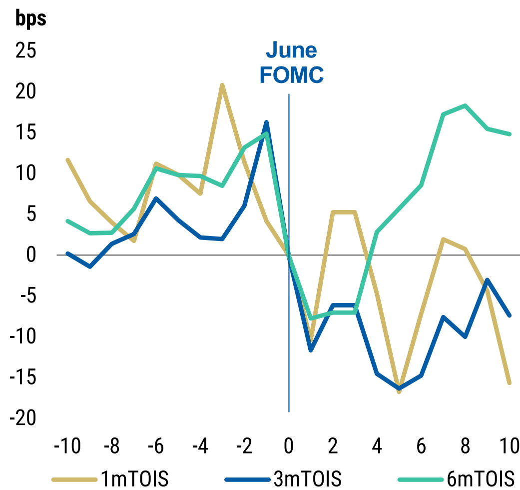
### T-bills & FOMC

This week, the Fed delivered a broadly anticipated 75bp hike, increasing the target range for fed funds to 225-250bp and all administered rates proportionally (IORB 240bp; ON RRP 230bp). Like the previous June FOMC, we continue to see T-bills cheapen vs. OIS prior to the meeting and richen after the risk event. This is due to investors on the margin having the incentive to sell out of T-bills and sit in cash/repo until they get more clarity on the future path of hikes post-meeting.

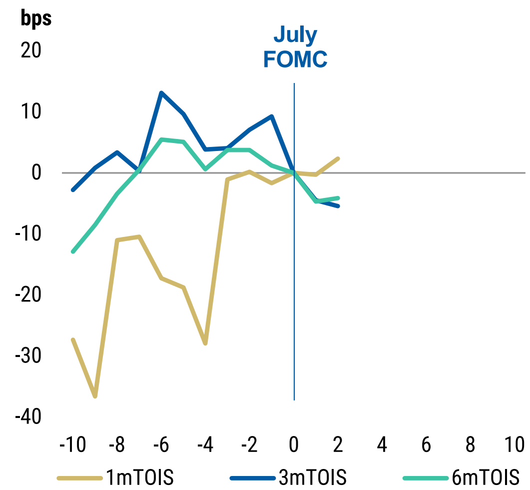
As shown in Exhibit 76 and Exhibit 77, in the 10 trading days prior to the June and July meetings, the market saw a general cheapening of 1m, 3m, and 6m T-bills vs. OIS. Post June FOMC, 1m and 3m T-bills were richer vs. OIS while 6m T-bills cheapened, reflecting investor preference to stay short.

**Exhibit 76:** T-bills vs. OIS around June FOMC




Source: Bloomberg, Morgan Stanley Research

**Exhibit 77:** T-bills vs. OIS around July FOMC



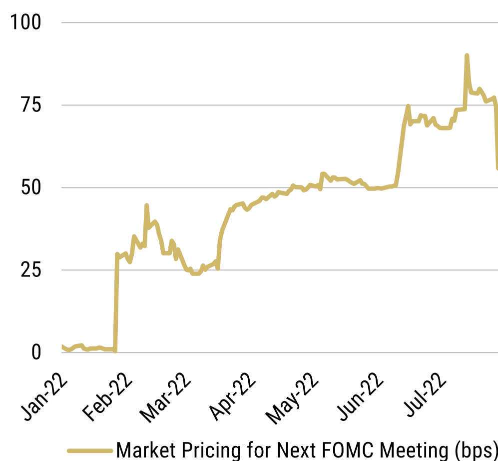

Source: Bloomberg, Morgan Stanley Research

Post July FOMC, we have seen a similar trend in 3m and 6m T-bills, while 1m T-bills have lagged and cheapened vs. OIS. Even though 2 days of trading are not enough to make a trend, it is valuable to consider whether we will follow the post June FOMC playbook this time. Outperformance of 3m/6m vs. 1m T-bills moving forward could indicate less uncertainty from investors regarding the Fed's future path of hikes.

## Playing It Safe?

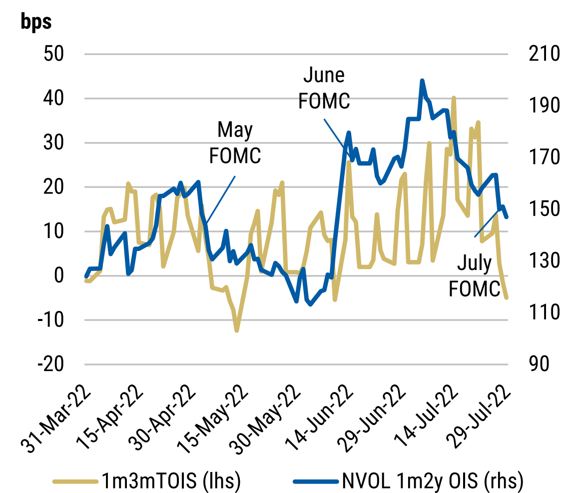
We start by considering that OIS forwards are now pricing ~56bp for September (Exhibit 78). This suggests that the market is seeing 50bp as the more likely scenario even though Chair Powell explicitly mentioned that the next hike "will depend on the data we get between now and then". This leaves room for data surprises to shift market pricing as we now must wait 8 weeks for the next FOMC vs. 6 last time. Hence, increased uncertainty around the next FOMC could impact the relative demand of T-bills.

**Exhibit 78:** OIS forwards imply 50bp most likely next Sept. FOMC




Source: Bloomberg, Morgan Stanley Research

**Exhibit 79:** 1m likely to outperform 3m T-bills with increasing volatility




Source: Bloomberg, Morgan Stanley Research

In Exhibit 79, we compare the 1m3mTOIS spread to normalized implied volatility from 1m2y OIS swaptions as a proxy of uncertainty and find that investors favor 1m over 3m T-bills in periods of increasing volatility. This could help explain why 1m TOIS outperformed post June FOMC (Exhibit 76) as volatility remained elevated/increasing.

On the other hand, volatility was declining leading up to and has been since the July FOMC and is in line with the outperformance of 3m/6m T-bills relative to 1m (Exhibit 77). As of today, the 3m1mTOIS spread is inverted at -5bp, coming down from a recent high of +40bp on 7/14. This suggests that, if volatility remains contained or decreases, the strong outperformance of 1mTOIS that we observed post June FOMC is less likely this time around.

# 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 80:** Government bond yield weekly pivots, support and resistance levels

| | UST 10y | CAN 10y | DBR 10y | UKT 10y | JGB 20y | ACGB 10y |
|---|---|---|---|---|---|---|
| Weekly resistance 3 | 3.330 | 3.495 | 1.504 | 2.426 | 1.004 | 3.807 |
| Weekly resistance 2 | 3.267 | 3.445 | 1.465 | 2.378 | 0.986 | 3.725 |
| Weekly resistance 1 | 3.194 | 3.387 | 1.416 | 2.320 | 0.968 | 3.692 |
| Weekly pivot high | 3.006 | 3.237 | 1.292 | 2.174 | 0.918 | 3.547 |
| Weekly pivot low | 2.974 | 3.212 | 1.272 | 2.150 | 0.908 | 3.506 |
| Weekly Support 1 | 2.912 | 3.162 | 1.233 | 2.102 | 0.890 | 3.424 |
| Weekly Support 2 | 2.839 | 3.104 | 1.184 | 2.044 | 0.872 | 3.391 |
| Weekly Support 3 | 2.755 | 3.037 | 1.129 | 1.979 | 0.849 | 3.320 |

Source: Morgan Stanley Research

**Exhibit 81:** Foreign exchange rates weekly pivots, support, and resistance levels

| | DXY | EURUSD | USDJPY | GBPUSD | AUDUSD | USDCAD |
|---|---|---|---|---|---|---|
| Weekly resistance 3 | 109.47 | 1.0631 | 137.60 | 1.2314 | 0.6972 | 1.3202 |
| Weekly resistance 2 | 108.83 | 1.0482 | 137.23 | 1.2203 | 0.6945 | 1.3139 |
| Weekly resistance 1 | 108.33 | 1.0389 | 136.92 | 1.2135 | 0.6922 | 1.3108 |
| Weekly pivot high | 106.82 | 1.0240 | 136.01 | 1.2025 | 0.6853 | 1.2988 |
| Weekly pivot low | 106.50 | 1.0198 | 135.82 | 1.1988 | 0.6839 | 1.2956 |
| Weekly Support 1 | 105.86 | 1.0091 | 135.45 | 1.1914 | 0.6812 | 1.2893 |
| Weekly Support 2 | 105.36 | 0.9998 | 135.14 | 1.1846 | 0.6789 | 1.2862 |
| Weekly Support 3 | 104.66 | 0.9933 | 134.72 | 1.1810 | 0.6757 | 1.2804 |

Source: Morgan Stanley Research

**Exhibit 82:** Foreign exchange rates weekly pivots, support, and resistance levels

| | EURJPY | EURCHF | EURNOK | EURSEK | NOKSEK | AUDNZD |
|---|---|---|---|---|---|---|
| Weekly resistance 3 | 144.80 | 1.0133 | 10.4515 | 10.8760 | 1.0645 | 1.1179 |
| Weekly resistance 2 | 142.70 | 1.0064 | 10.3906 | 10.8186 | 1.0590 | 1.1154 |
| Weekly resistance 1 | 141.40 | 1.0022 | 10.3530 | 10.7831 | 1.0562 | 1.1128 |
| Weekly pivot high | 139.30 | 0.9953 | 10.2921 | 10.7257 | 1.0456 | 1.1058 |
| Weekly pivot low | 138.69 | 0.9931 | 10.2767 | 10.7092 | 1.0428 | 1.1046 |
| Weekly Support 1 | 137.20 | 0.9884 | 10.2312 | 10.6683 | 1.0373 | 1.1021 |
| Weekly Support 2 | 135.90 | 0.9842 | 10.1936 | 10.6328 | 1.0345 | 1.0995 |
| Weekly Support 3 | 135.01 | 0.9816 | 10.1635 | 10.6086 | 1.0294 | 1.0963 |

Source: Morgan Stanley Research

# Cyclical and Secular Trends

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## Government Bonds

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.

**Exhibit 83:** Summary of cyclical (tactical & strategic) and secular bull, bear, and range-bound rates markets

| | Daily Last | Daily Cloud Lower | Daily Cloud Upper | 200d MA | Cyclical Tactical Daily | Cyclical Strategic Weekly | Secular Monthly |
|---|---|---|---|---|---|---|---|
| **UST 2y** | 2.884 | 2.862 | 3.053 | 1.808 | Range bound | Bear Market | Bear Market |
| **UST 5y** | 2.676 | 3.096 | 3.235 | 2.157 | Bull Market | Bear Market | Bear Market |
| **UST 10y** | 2.649 | 3.070 | 3.174 | 2.255 | Bull Market | Bear Market | Bear Market |
| **UST 30y** | 3.010 | 3.125 | 3.261 | 2.506 | Bull Market | Bear Market | Bear Market |
| **DBR 2y** | 0.281 | 0.666 | 0.932 | -0.127 | Bull Market | Bear Market | Bear Market |
| **DBR 5y** | 0.529 | 1.122 | 1.298 | 0.195 | Bull Market | Bear Market | Bear Market |
| **DBR 10y** | 0.817 | 1.341 | 1.534 | 0.464 | Bull Market | Bear Market | Bear Market |
| **DBR 30y** | 1.072 | 1.442 | 1.655 | 0.706 | Bull Market | Bear Market | Bear Market |
| **UKT 2y** | 1.710 | 1.764 | 1.978 | 1.228 | Bull Market | Bear Market | Bear Market |
| **UKT 5y** | 1.591 | 1.834 | 2.024 | 1.298 | Bull Market | Bear Market | Bear Market |
| **UKT 10y** | 1.864 | 2.202 | 2.384 | 1.534 | Bull Market | Bear Market | Bear Market |
| **UKT 30y** | 2.403 | 2.395 | 2.582 | 1.723 | Range bound | Bear Market | Bear Market |
| **JGB 10y** | 0.185 | 0.257 | 0.261 | 0.177 | Bull Market | Bear Market | Bear Market |
| **JGB 20y** | 0.851 | 0.834 | 0.861 | 0.668 | Range bound | Bear Market | Bear Market |
| **JGB 30y** | 1.203 | 1.108 | 1.155 | 0.911 | Bear Market | Bear Market | Bear Market |
| **JGB 40y** | 1.359 | 1.197 | 1.250 | 0.986 | Bear Market | Bear Market | Bear Market |
| **ACGB 2y** | 2.430 | 2.699 | 2.944 | 1.606 | Bull Market | Bear Market | Bear Market |
| **ACGB 5y** | 2.777 | 3.286 | 3.524 | 2.277 | Bull Market | Bear Market | Bear Market |
| **ACGB 10y** | 3.056 | 3.611 | 3.847 | 2.591 | Bull Market | Bear Market | Bear Market |
| **ACGB 20y** | 3.430 | 3.876 | 4.095 | 3.009 | Bull Market | Bear Market | Bear Market |
| **NZGB 2y** | 3.270 | 3.506 | 3.521 | 2.678 | Bull Market | Bear Market | Bull Market |
| **NZGB 5y** | 3.272 | 3.716 | 3.839 | 2.920 | Bull Market | Bear Market | Bull Market |
| **NZGB 10y** | 3.415 | 3.927 | 4.074 | 3.100 | Bull Market | Bear Market | Bear Market |
| **CAN 2y** | 2.964 | 2.888 | 3.123 | 1.947 | Range bound | Bear Market | Bear Market |
| **CAN 5y** | 2.616 | 3.037 | 3.223 | 2.157 | Bull Market | Bear Market | Bear Market |
| **CAN 10y** | 2.610 | 3.121 | 3.324 | 2.294 | Bull Market | Bear Market | Bear Market |
| **CAN 30y** | 2.773 | 3.033 | 3.232 | 2.426 | Bull Market | Bear Market | Bear Market |

Source: Morgan Stanley Research, Bloomberg

**Exhibit 84:** Summary of cyclical (tactical and strategic) and secular bull, bear, and range-bound FX markets

| | Daily Last | Daily Cloud Lower | Daily Cloud Upper | 200d MA | Cyclical Tactical Daily | Cyclical Strategic Weekly | Secular Monthly |
|---|---|---|---|---|---|---|---|
| **DXY** | 105.83 | 102.68 | 104.07 | 99.45 | Bull Market | Bull Market | Bull Market |
| **USDJPY** | 133.27 | 130.90 | 132.82 | 122.27 | Bull Market | Bull Market | Bull Market |
| **USDCAD** | 1.2795 | 1.2769 | 1.2860 | 1.2723 | Range bound | Bull Market | Bear Market |
| **USDCHF** | 0.9524 | 0.9690 | 0.9803 | 0.9413 | Bear Market | Bull Market | Bear Market |
| **USDNOK** | 9.6742 | 9.4037 | 9.7954 | 9.1496 | Range bound | Bull Market | Bear Market |
| **USDSEK** | 10.1551 | 9.8392 | 10.0740 | 9.5128 | Bull Market | Bull Market | Bull Market |
| **EURUSD** | 1.0220 | 1.0528 | 1.0643 | 1.0964 | Bear Market | Bear Market | Bear Market |
| **GBPUSD** | 1.2171 | 1.2235 | 1.2541 | 1.2989 | Bear Market | Bear Market | Bear Market |
| **AUDUSD** | 0.6985 | 0.7014 | 0.7152 | 0.7175 | Bear Market | Bear Market | Bull Market |
| **NZDUSD** | 0.6278 | 0.6342 | 0.6550 | 0.6661 | Bear Market | Bear Market | Range bound |
| **EURJPY** | 136.16 | 138.46 | 140.07 | 133.71 | Bear Market | Bull Market | Bull Market |
| **NOKSEK** | 1.0490 | 1.0271 | 1.0496 | 1.0400 | Range bound | Bull Market | Bull Market |
| **AUDNZD** | 1.1109 | 1.1000 | 1.1057 | 1.0780 | Bull Market | Bull Market | Bull Market |
| **USDBRL** | 5.1733 | 4.9281 | 5.0176 | 5.2505 | Bull Market | Bear Market | Bull Market |
| **USDMXN** | 20.37 | 20.06 | 20.19 | 20.43 | Bull Market | Bear Market | Bear Market |
| **USDARS** | 131.26 | 117.86 | 121.74 | 110.47 | Bull Market | Bull Market | Bull Market |
| **USDCLP** | 900.24 | 853.77 | 869.31 | 840.56 | Bull Market | Bull Market | Bull Market |
| **USDCOP** | 4,295.52 | 3,929.10 | 3,959.40 | 3,959.62 | Bull Market | Bull Market | Bull Market |
| **USDPEN** | 3.9219 | 3.7291 | 3.7505 | 3.8533 | Bull Market | Range bound | Bull Market |
| **USDZAR** | 16.62 | 15.39 | 15.81 | 15.61 | Bull Market | Bull Market | Bull Market |
| **USDTRY** | 17.9196 | 16.0089 | 16.9097 | 14.3858 | Bull Market | Bull Market | Bull Market |
| **USDILS** | 3.3987 | 3.3370 | 3.4156 | 3.2568 | Range bound | Bull Market | Bear Market |
| **USDRUB** | 118.69 | 76.43 | 77.44 | 75.11 | Bull Market | Bull Market | Bull Market |
| **USDPLN** | 4.6360 | 4.3910 | 4.4248 | 4.2471 | Bull Market | Bull Market | Bull Market |
| **USDCZK** | 24.0737 | 23.3372 | 23.4899 | 22.6640 | Bull Market | Bull Market | Bull Market |
| **USDHUF** | 396.26 | 362.72 | 375.37 | 343.75 | Bull Market | Bull Market | Bull Market |
| **USDCNY** | 6.7445 | 6.5849 | 6.7106 | 6.4810 | Bull Market | Bull Market | Range bound |
| **USDIDR** | 14,833.00 | 14,599.00 | 14,701.00 | 14,445.22 | Bull Market | Bull Market | Range bound |
| **USDINR** | 79.27 | 77.05 | 78.02 | 76.23 | Bull Market | Bull Market | Bull Market |
| **USDKRW** | 1,299.25 | 1,262.18 | 1,279.63 | 1,226.72 | Bull Market | Bull Market | Bull Market |
| **USDMYR** | 4.4508 | 4.3170 | 4.4025 | 4.2627 | Bull Market | Bull Market | Bull Market |
| **USDPHP** | 55.15 | 53.01 | 53.61 | 52.07 | Bull Market | Bull Market | Bull Market |
| **USDSGD** | 1.3805 | 1.3748 | 1.3849 | 1.3668 | Range bound | Bull Market | Bear Market |
| **USDTWD** | 29.9410 | 29.3760 | 29.5683 | 28.6005 | Bull Market | Bull Market | Bear Market |
| **USDTHB** | 36.8070 | 34.2665 | 34.7885 | 33.8519 | Bull Market | Bull Market | Bull Market |
| **GOLD** | 1,766 | 1,842 | 1,893 | 1,844 | Bear Market | Bear Market | Bull Market |
| **SILVER** | 20.36 | 21.58 | 23.34 | 22.91 | Bear Market | Bear Market | Bull Market |
| **CRUDE OIL** | 98.62 | 104.59 | 108.40 | 88.40 | Bear Market | Bull Market | Bull Market |

Source: Morgan Stanley Research, Bloomberg

# G4 Smarter (beta) Trading Strategy

MORGAN STANLEY & CO. LLC

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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 85:** 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% | 100% | 0% | 100% | 100% | 6/30/2022 | 8/5/2022 | - | - |
| GE 10y Future | 29.25% | 100% | 0% | 100% | 100% | 6/30/2022 | 8/4/2022 | - | - |
| US 10y Future | 30.50% | 100% | 0% | 100% | 100% | 6/30/2022 | 8/5/2022 | - | - |
| UK 10y Future | 7.75% | 100% | 0% | 100% | 100% | 7/1/2022 | 8/5/2022 | - | - |

Source: Morgan Stanley Research

# Bond Market Indicators

**Our BMI(10)** models are neutral to mildly bearish on all markets, except for Japan, Canada, and New Zealand. The vol-adjusted carry signal is positive for Japan. Momentum signals remained broadly bearish. Equity market signals are bullish for all markets.

**Our BMI(2)** models are neutral to bearish for all markets, except for Australia. The vol-adjusted carry signal is notably negative across all markets, except for Japan. Momentum signals are quite bearish across all markets. Business cycle indicators are negative for the UK and Australia.

**Our iBMI** models are less bearish for all the regions. Equity signal grew less bearish for all the regions. Momentum signals grew less bearish for TIPS, UKTi, & JGBi, and grew more bearish for HICPxT. Oil signal grew less bearish for all the regions.

## Latest readings

**Exhibit 86:** Morgan Stanley Bond Market Indicators - BMI(10)

| | Vol-Adjusted Carry | Momentum | Equity Markets | Business Cycle | FX | Average | Overall |
|---|---|---|---|---|---|---|---|
| **US** | -9.5 (-9.5) | -2.6 (-1.8) | 0.9 (5.8) | 0.4 (0.4) | -9.1 (-8.4) | -4.0 (-2.7) | **-4.0 (-2.7)** |
| **DE** | -8.1 (-8.3) | -1.6 (-0.2) | 5.8 (7.4) | 1.6 (1.6) | -5.7 (0.5) | -1.6 (0.2) | **-1.6 (0.0)** |
| **UK** | -5.2 (-6.0) | -1.8 (-0.9) | 5.8 (7.0) | -6.5 (-6.5) | -3.6 (-0.4) | -2.3 (-1.4) | **-2.3 (0.0)** |
| **JP** | 6.9 (7.7) | -9.7 (-9.7) | 6.2 (5.6) | -8.1 (8.6) | 9.5 (6.8) | 1.0 (3.8) | **0.0 (3.8)** |
| **AU** | -4.0 (-3.5) | -3.8 (-0.5) | 5.5 (7.5) | 1.1 (-1.7) | 9.8 (9.9) | 1.7 (2.3) | **1.7 (2.3)** |
| **NZ** | -7.9 (-7.5) | -2.4 (1.0) | 3.7 (5.1) | 0.3 (0.3) | -9.9 (-9.3) | -3.2 (-2.1) | **0.0 (-2.1)** |
| **CA** | -9.8 (-9.8) | -1.8 (-3.6) | 7.2 (8.8) | 6.4 (6.4) | 1.2 (-4.2) | 0.6 (-0.5) | **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 87:** Morgan Stanley Bond Market Indicators - BMI(2)

| | Vol-Adjusted Carry | Momentum | Equity Markets | Business Cycle | FX | Average | Overall |
|---|---|---|---|---|---|---|---|
| **US** | -9.5 (1.3) | -2.6 (-7.6) | 0.9 (5.8) | 0.4 (0.4) | -9.1 (-7.4) | -4.0 (-1.5) | **-4.0 (0.0)** |
| **DE** | -8.1 (6.0) | -1.6 (0.2) | 5.8 (7.4) | 1.6 (1.6) | -5.7 (-0.8) | -1.6 (2.9) | **-1.6 (2.9)** |
| **UK** | -5.2 (5.4) | -1.8 (-4.4) | 5.8 (7.0) | -6.5 (-6.5) | -3.6 (6.6) | -2.3 (1.6) | **-2.3 (1.6)** |
| **JP** | 6.9 (7.3) | -9.7 (9.3) | 6.2 (5.6) | -8.1 (8.6) | 9.5 (0.0) | 1.0 (6.2) | **0.0 (6.2)** |
| **AU** | -4.0 (3.9) | -3.8 (-1.3) | 5.5 (7.5) | 1.1 (-1.7) | 9.8 (9.6) | 1.7 (3.6) | **1.7 (3.6)** |
| **NZ** | -7.9 (2.8) | -2.4 (-1.7) | 3.7 (5.1) | 0.3 (0.3) | -9.9 (-9.9) | -3.2 (-0.7) | **0.0 (0.0)** |
| **CA** | -9.8 (-4.4) | -1.8 (-8.1) | 7.2 (8.8) | 6.4 (6.4) | 1.2 (9.9) | 0.6 (2.5) | **0.0 (2.5)** |

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 88:** Morgan Stanley Bond Market Indicators - xBMIs

| | Long US | Long DE | Long UK | Long JP | Long AU | Long NZ | Long CA |
|---|---|---|---|---|---|---|---|
| **vs. US** | -9.5 (0.0) | -2.6 (0.0) | 0.9 (0.0) | 0.4 (3.2) | -9.1 (2.5) | -4.0 (0.0) | -4.0 (0.0) |
| **vs. DE** | -8.1 (0.0) | -1.6 (0.0) | 5.8 (0.0) | 1.6 (1.8) | -5.7 (0.0) | -1.6 (0.0) | -1.6 (0.0) |
| **vs. UK** | -5.2 (0.0) | -1.8 (0.0) | 5.8 (0.0) | -6.5 (2.6) | -3.6 (1.8) | -2.3 (0.0) | -2.3 (0.0) |
| **vs. JP** | 6.9 (-3.2) | -9.7 (-1.8) | 6.2 (-2.6) | -8.1 (0.0) | 9.5 (0.0) | 1.0 (-2.9) | 0.0 (-2.1) |
| **vs. AU** | -4.0 (-2.5) | -3.8 (0.0) | 5.5 (-1.8) | 1.1 (0.0) | 9.8 (0.0) | 1.7 (-2.2) | 1.7 (0.0) |
| **vs. NZ** | -7.9 (0.0) | -2.4 (0.0) | 3.7 (0.0) | 0.3 (2.9) | -9.9 (2.2) | -3.2 (0.0) | 0.0 (0.0) |
| **vs. CA** | -9.8 (0.0) | -1.8 (0.0) | 7.2 (0.0) | 6.4 (2.1) | 1.2 (0.0) | 0.6 (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

**Exhibit 89:** Morgan Stanley Euro Sovereign Bond Market Indicators - eBMI

| | Business Cycle Surprises | Momentum | Vol. Adj. Carry | Supply | Risky Assets | Overall |
|---|---|---|---|---|---|---|
| **Periphery vs. Core** | 0.9 (1.2) | -3.9 (-2.8) | 2.0 (2.0) | 5.2 (5.2) | 0.7 (-0.3) | **1.0 (1.1)** |
| **Semi-Core vs. Core** | 6.6 (7.0) | -3.0 (-6.6) | 5.2 (5.3) | -1.0 (-1.0) | 9.0 (7.4) | **3.4 (2.4)** |
| **Periphery vs. Semi-Core** | -2.8 (-2.9) | -0.4 (1.9) | -1.6 (-1.6) | 3.1 (3.1) | -4.2 (-3.8) | **-2.4 (-1.3)** |

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.

**Exhibit 90:** Morgan Stanley Inflation Bond Market Indicators - iBMI

| Market | Oil | Momentum | Equities | Value | Average | Overall |
|---|---|---|---|---|---|---|
| **TIPS** | -2.4 (-3.6) | -4.1 (-4.4) | -1.0 (-2.5) | 0.5 (2.1) | -1.7 (-2.1) | **-1.7 (-2.1)** |
| **UKTi** | -2.1 (-2.8) | -7.1 (-7.6) | -1.6 (-1.8) | 6.7 (7.8) | -1.0 (-1.1) | **-1.0 (-1.1)** |
| **HICPxT** | -1.7 (-2.9) | -3.0 (-2.7) | -2.3 (-3.2) | -2.7 (-2.1) | -2.4 (-2.7) | **-2.4 (-2.7)** |
| **JGBi** | -2.2 (-3.2) | -0.2 (-1.0) | -2.5 (-2.6) | -6.0 (-6.2) | -2.7 (-3.3) | **-2.7 (-3.3)** |

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

### How to read the xBMIs

The "FX/Rates" row displays the FX/rates relationship signal. The "Combined BMI differential" row displays the difference between the relevant BMI(10) signals after having applied the signal strength check, i.e., abs(signal) >= 1.5. The "Average xBMI" row displays the average of the "FX/Rates" and "Combined BMI differential" rows. And the "Overall" score requires that the sign of the "Average xBMI" signal match the sign of the "Combined BMI differential" signal and be ≥ the absolute value of 2.

# Swap Spread Indicators

**Our SSI(2)** models imply that 2y spreads are roughly 2.4bp wide to fair value on a 6m rolling lookback. The 0.5 trading 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 roughly 0.4bp wide to fair value on a 6m rolling lookback. No 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 1.7bp wide to fair value on our 2y lookback window. No trading 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 ~1.9bp flat to fair value using a 6m lookback. The 10s30s spread curve is about ~3.5bp steep 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

**Exhibit 91:** 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** | 25.3 | 23 | 10.7 | 27.7 |
| **10y Swap Spreads** | 7.2 | 9.4 | 4.4 | 7.6 |
| **30y Swap Spreads** | -23.9 | -26.2 | -23.6 | -24.5 |
| **2s10s Swap Spread Curve** | -18.1 | -13.6 | -6.3 | -20.1 |
| **2s30s Swap Spread Curve** | -49.3 | -49.2 | -34.3 | -52.2 |
| **10s30s Swap Spread Curve** | -31.1 | -35.6 | -28 | -32.1 |

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.

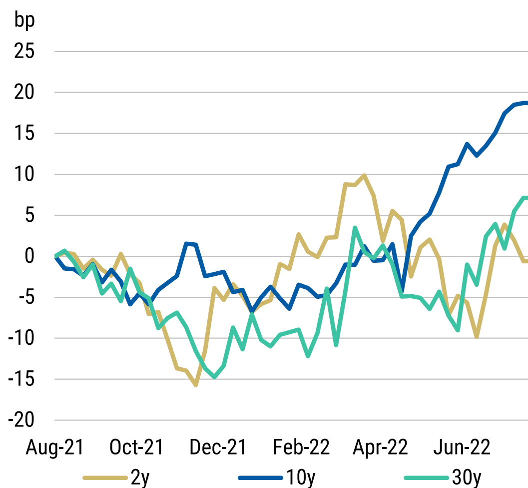
**Exhibit 92:** Morgan Stanley Swap Spread Indicators - Trading Signals

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

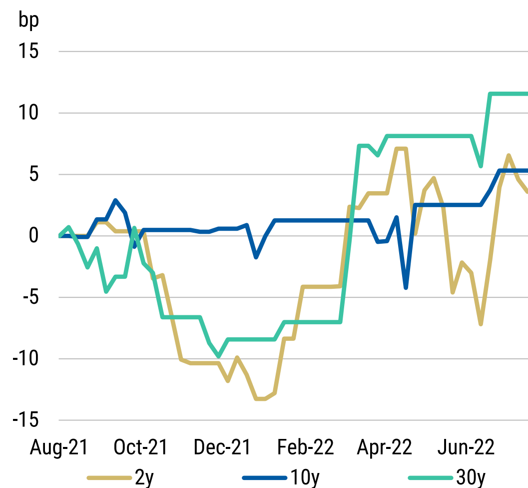
## Backtesting results

**Exhibit 93:** 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 94:** 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 (20y re-opening, new 10y TII, 2y, 5y, 7y) settling at the end of July is $160bn vs. $8.3bn coupons and $119.9bn redemptions, resulting in a net issuance of $31.8bn. **In the euro area,** we estimate €13bn of issuance (from GER, FRA, SPA, BEL), against €12.2bn coupons and €18.2bn redemptions (SPA). This results in net issuance of -€17.3bn. **In the UK,** UKT 1% Gilt 2032 will be tapped for £2.75bn against £0.59bn coupons and no redemptions. **In Japan,** 10y JGB will be issued for ¥2700bn and 10y JGBi for ¥250bn, against ¥3.3bn coupons and ¥3.1tr redemptions. **In Canada,** 10y CAN 2.5% Dec 2032 will be issued for $3bn, against $0.13bn coupons and $30bn redemptions. **In Australia,** ACGB 1.75% Nov 2032 will be issued for $800m and ACGB 4.75% April 2027 for $700m, against no cash flow coming to the market. **In New Zealand,** NZGB 0.50% May 2026, NZGB 3.0% Apr 2029, NZGB 2.75% May 2051 will be issued for $200m, $150m and $50m, respectively, against no cash flow coming to the market.

**Exhibit 95:** Sovereign supply calendar

| Monday | Tuesday | Wednesday | Thursday | Friday |
|---|---|---|---|---|
| **1-AUG** | **2-AUG** | **3-AUG** | **4-AUG** | **5-AUG** |
| | UK: UKT 1% Gilt 2032, £2.75bn<br>JPN: 10y JGB, ¥2700bn | GER: DBR 1% 15 May 2038, €1.5bn<br>AUS: ACGB 1.75% 21 Nov 2032, $800mn | FRA: Long-term Auction, €5-6bn OAT 2% Nov 2032, OAT 1.25% May 2034<br>SPA: SPGB Auction, €5bn*<br>SPGB 1.3% Oct 2026, SPGB 0.8% July 2029, SPGB 2.55% Oct 2032, SPGBei 0.7% Nov 2033<br>JPN: 10y JGBi, ¥250bn<br>CAN: 10y CAN 2.5% Dec 2032, $3bn<br>NZ: NZGB 0.50% May 2026, $200mn; NZGB 3.0% Apr 2029, $150mn; NZGB 2.75% May 2051, $50mn | BEL: ORI Auction, €0.5bn*<br>AUS: ACGB 4.75% April 2027, $700mn |
| **8-AUG** | **9-AUG** | **10-AUG** | **11-AUG** | **12-AUG** |
| | GER: New BKO 13 Sept 2024, €6bn<br>AUT: RAGB Auction, €1.5bn*<br>UK: UKT 1.25% Gilt 2051, £1.7bn*<br>US: New 3y UST, $43bn*<br>JPN: 30y JGB, ¥900bn* | GER: DBR 1.25% 15 Aug 2048 Tap, €1.5bn<br>US: New 10y UST, $36bn* | ITA: BTP Auction Cancelled<br>US: New 30y UST, $22bn*<br>CAN: 2y CAN, $3.5bn*<br>NZ: NZGB 4.50% 15 Apr 2027, $200mn; NZGB 2.00% 15 May 2032, $150mn; NZGB 2.75% 15 Apr 2037, $50mn | |
| **15-AUG** | **16-AUG** | **17-AUG** | **18-AUG** | **19-AUG** |
| | GER: OBL 15 Oct 2027 Tap, €4bn<br>UK: UKT 0.5% Gilt 2029, £3.4bn*<br>JPN: 5y JGB, ¥2500bn* | US: New 20y UST, $17bn* | FRA: OAT Auction, €7-8bn*<br>SPA: SPGB Auction Cancelled<br>US: 30y TIPS Re-opening, $8bn*<br>JPN: 20y JGB, ¥1200bn*<br>CAN: 3y CAN, $4bn*<br>NZ: NZGB 0.50% May 2026, $200mn; NZGB 3.0% Apr 2029, $150mn; NZGB 2.75% May 2051, $50mn | |

Source: Morgan Stanley Research, Treasuries
* Morgan Stanley estimate. ** Possible Auction

# In Case You Missed It

Podcast: Strong Views on Global Macro: Takeaways from the July FOMC Meeting | Ep. 101Metals

*28 Jul 2022*

The Fed delivered a 75bp hike and Chair Powell delivered Q&A the market interpreted dovishly. Matt talks with Guneet Dhingra, Head of US Rates Strategy, about his top 3 takeaways from a markets perspective, what it means for trading rates markets and the yield curve, and how the USD may fare.

US Economics & Global Macro Strategy: FOMC Reaction: July Meeting

*28 Jul 2022*

The FOMC delivered a second 75bp rate hike at its July meeting. The pace of tightening going forward will be highly data-dependent, and we continue to highlight upside risk to our call for a 50bp hike in September. Our strategists close curve flatteners, and suggest long 1y1y CPI swaps.

BoE Preview: Why Now versus Why Not?

*28 Jul 2022*

While a very close call, we expect a 25bp BoE hike next week, in a 6:3 vote. We expect subdued forecasts alongside an unchanged message on potential forceful action against more persistent inflationary pressure. We're neutral on GBP and stay long IL31 and 5y RPI swaps and rec Sep-22 MPC.

Global Volatility Playbook: Ahead of the Cycle

*28 Jul 2022*

Selling volatility does best in the aftermath of bear markets. We believe allocating to volatility risk premia should deliver strong returns given the broad-based repricing in implied vols even as realised vols come off the boil.

Global Macro Strategy: FX Month-End Signal – July 2022

*26 Jul 2022*

We find cyclicality in G10 FX trading volumes and returns over a calendar month and present the returns of our model for July month-end. Local equity markets strengthened recently, suggesting USD will weaken versus many currencies in the G10 during the final week of the month.

# Forecasts

## Government bonds

**Exhibit 96:** Morgan Stanley sovereign 2y, 5y, 10y, and 30y yield base case forecasts

| | 2Y | | | | 5Y | | | | 10Y | | | | 30Y | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3Q22 | 4Q22 | 1Q23 | 2Q23 | 3Q22 | 4Q22 | 1Q23 | 2Q23 | 3Q22 | 4Q22 | 1Q23 | 2Q23 | 3Q22 | 4Q22 | 1Q23 | 2Q23 |
| **US** | 3.15 | 4.00 | 3.70 | 3.40 | 3.05 | 3.85 | 3.55 | 3.25 | 2.90 | 3.50 | 3.28 | 3.05 | 3.00 | 3.55 | 3.40 | 3.25 |
| **Germany** | 1.60 | 1.40 | 1.20 | 1.00 | 2.00 | 1.70 | 1.50 | 1.30 | 2.25 | 2.00 | 1.75 | 1.60 | 2.35 | 2.25 | 2.10 | 2.00 |
| **Japan** | -0.10 | -0.10 | -0.05 | -0.05 | 0.00 | 0.05 | 0.10 | 0.10 | 0.20 | 0.25 | 0.30 | 0.30 | 0.95 | 1.00 | 1.00 | 1.10 |
| **UK** | 1.50 | 1.50 | 1.50 | 1.50 | 1.60 | 1.60 | 1.60 | 1.60 | 2.20 | 2.10 | 2.25 | 2.25 | 2.30 | 2.20 | 2.25 | 2.25 |
| **Canada** | 3.10 | 3.25 | 3.30 | 3.30 | 3.10 | 3.20 | 3.25 | 3.30 | 3.10 | 3.20 | 3.30 | 3.35 | 3.10 | 3.20 | 3.30 | 3.35 |
| **Australia** | 3.10 | 3.15 | 3.15 | 3.15 | 3.40 | 3.50 | 3.55 | 3.60 | 3.70 | 3.75 | 3.85 | 3.90 | 4.05 | 4.10 | 4.15 | 4.20 |
| **New Zealand** | 3.65 | 3.70 | 3.70 | 3.70 | 3.85 | 3.90 | 3.95 | 4.00 | 4.00 | 4.05 | 4.10 | 4.10 | 4.10 | 4.15 | 4.20 | 4.25 |
| **Austria*** | 5 | 5 | 5 | 5 | 10 | 15 | 15 | 15 | 45 | 50 | 60 | 50 | 50 | 55 | 65 | 55 |
| **Netherlands*** | 5 | 5 | 5 | 5 | 10 | 10 | 10 | 10 | 25 | 30 | 35 | 30 | 15 | 20 | 25 | 20 |
| **France*** | 5 | 5 | 5 | 5 | 20 | 25 | 30 | 25 | 50 | 55 | 65 | 55 | 75 | 85 | 95 | 85 |
| **Belgium*** | 5 | 5 | 5 | 5 | 20 | 25 | 30 | 25 | 50 | 60 | 70 | 60 | 90 | 100 | 110 | 100 |
| **Ireland*** | 5 | 5 | 5 | 5 | 20 | 30 | 35 | 30 | 55 | 70 | 80 | 70 | 80 | 95 | 105 | 95 |
| **Spain*** | 50 | 65 | 75 | 70 | 70 | 80 | 90 | 80 | 110 | 130 | 140 | 130 | 150 | 170 | 180 | 170 |
| **Italy*** | 70 | 100 | 130 | 120 | 140 | 160 | 190 | 180 | 200 | 230 | 250 | 240 | 240 | 280 | 290 | 280 |
| **Portugal*** | 45 | 60 | 70 | 65 | 65 | 75 | 85 | 75 | 125 | 155 | 165 | 155 | 175 | 215 | 225 | 215 |

Source: Morgan Stanley Research, *Spread to German Bunds

**Exhibit 97:** Morgan Stanley sovereign 10-year yield bull, base, and bear case forecasts

| | Bull | | | | Base | | | | Bear | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3Q22 | 4Q22 | 1Q23 | 2Q23 | 3Q22 | 4Q22 | 1Q23 | 2Q23 | 3Q22 | 4Q22 | 1Q23 | 2Q23 |
| US | 2.80 | 2.80 | 3.28 | 2.50 | 2.90 | 3.50 | 3.28 | 3.05 | 3.00 | 3.75 | 3.88 | 4.00 |
| Germany | 1.75 | 1.30 | 1.10 | 0.90 | 2.25 | 2.00 | 1.75 | 1.60 | 2.40 | 2.75 | 2.50 | 2.25 |
| Japan | 0.15 | 0.15 | 0.10 | 0.05 | 0.20 | 0.25 | 0.30 | 0.30 | 0.25 | 0.35 | 0.35 | 0.45 |
| UK | 1.70 | 1.70 | 1.65 | 1.65 | 2.20 | 2.10 | 2.25 | 2.25 | 2.30 | 2.30 | 2.20 | 2.10 |
| Canada | 2.95 | 3.00 | 3.05 | 3.10 | 3.10 | 3.20 | 3.30 | 3.35 | 3.25 | 3.35 | 3.45 | 3.55 |
| Australia | 3.55 | 3.55 | 3.60 | 3.65 | 3.70 | 3.75 | 3.85 | 3.90 | 3.75 | 3.90 | 4.00 | 4.10 |
| New Zealand | 3.80 | 3.85 | 3.90 | 3.95 | 4.00 | 4.05 | 4.10 | 4.10 | 4.10 | 4.20 | 4.25 | 4.30 |
| Austria* | 40 | 45 | 55 | 45 | 45 | 50 | 60 | 50 | 55 | 60 | 70 | 60 |
| Netherlands* | 20 | 25 | 30 | 25 | 25 | 30 | 35 | 30 | 35 | 40 | 45 | 40 |
| France* | 45 | 50 | 60 | 50 | 50 | 55 | 65 | 55 | 60 | 65 | 75 | 65 |
| Belgium* | 45 | 55 | 65 | 55 | 50 | 60 | 70 | 60 | 60 | 70 | 80 | 70 |
| Ireland* | 50 | 65 | 75 | 65 | 55 | 70 | 80 | 70 | 65 | 80 | 90 | 80 |
| Spain* | 100 | 110 | 120 | 110 | 110 | 130 | 140 | 130 | 120 | 150 | 160 | 150 |
| Italy* | 175 | 190 | 220 | 200 | 200 | 230 | 250 | 240 | 210 | 250 | 270 | 260 |
| Portugal* | 110 | 115 | 125 | 115 | 125 | 155 | 165 | 155 | 135 | 175 | 185 | 175 |

Source: Morgan Stanley Research, *Spread to German Bunds

**Exhibit 98:** Morgan Stanley foreign exchange base case forecasts

| | 3Q22 | 4Q22 | 1Q23 | 2Q23 | 3Q23 | 4Q23 |
|---|---|---|---|---|---|---|
| **EUR/USD** | 0.97 | 0.99 | 1.01 | 1.03 | 1.05 | 1.08 |
| **USD/JPY** | 141 | 140 | 139 | 138 | 132 | 126 |
| **GBP/USD** | 1.15 | 1.17 | 1.18 | 1.20 | 1.23 | 1.25 |
| **USD/CHF** | 0.99 | 0.96 | 0.95 | 0.95 | 0.96 | 0.96 |
| **USD/SEK** | 11.24 | 10.81 | 10.50 | 10.19 | 9.80 | 9.42 |
| **USD/NOK** | 11.03 | 10.51 | 10.10 | 9.71 | 9.43 | 9.16 |
| **USD/CAD** | 1.34 | 1.30 | 1.28 | 1.27 | 1.27 | 1.26 |
| **AUD/USD** | 0.66 | 0.68 | 0.69 | 0.69 | 0.69 | 0.72 |
| **NZD/USD** | 0.61 | 0.63 | 0.64 | 0.65 | 0.63 | 0.65 |
| **EUR/JPY** | 137 | 139 | 140 | 142 | 139 | 136 |
| **EUR/GBP** | 0.84 | 0.85 | 0.86 | 0.86 | 0.86 | 0.86 |
| **EUR/CHF** | 0.96 | 0.95 | 0.96 | 0.98 | 1.01 | 1.03 |
| **EUR/SEK** | 10.90 | 10.70 | 10.60 | 10.50 | 10.32 | 10.13 |
| **EUR/NOK** | 10.70 | 10.40 | 10.20 | 10.00 | 9.93 | 9.85 |
| **USD/CNY** | 6.85 | 6.65 | 6.58 | 6.50 | 6.45 | 6.40 |
| **USD/HKD** | 7.85 | 7.84 | 7.82 | 7.80 | 7.78 | 7.77 |
| **USD/IDR** | 15700 | 15400 | 15100 | 14800 | 14708 | 14617 |
| **USD/INR** | 82.0 | 79.5 | 78.5 | 77.0 | 77.3 | 77.7 |
| **USD/KRW** | 1330 | 1315 | 1290 | 1270 | 1251 | 1231 |
| **USD/MYR** | 4.60 | 4.50 | 4.40 | 4.30 | 4.22 | 4.15 |
| **USD/PHP** | 59.0 | 57.0 | 56.0 | 55.0 | 55.0 | 55.0 |
| **USD/SGD** | 1.425 | 1.400 | 1.380 | 1.360 | 1.353 | 1.346 |
| **USD/TWD** | 30.3 | 29.9 | 29.6 | 29.3 | 29.4 | 29.5 |
| **USD/THB** | 37.5 | 36.5 | 36.0 | 35.0 | 34.5 | 34.1 |
| **USD/BRL** | 5.80 | 5.60 | 5.40 | 5.35 | 5.26 | 5.25 |
| **USD/MXN** | 21.50 | 21.20 | 21.00 | 20.70 | 20.71 | 20.73 |
| **USD/ARS** | 149 | 171 | 195 | 215 | 233 | 254 |
| **USD/CLP** | 1050 | 1040 | 1025 | 1000 | 941 | 883 |
| **USD/COP** | 4800 | 4650 | 4450 | 4300 | 4109 | 3918 |
| **USD/PEN** | 4.20 | 4.15 | 4.05 | 4.05 | 3.98 | 3.91 |
| **USD/ZAR** | 17.5 | 17.9 | 17.5 | 17.3 | 16.9 | 16.6 |
| **USD/TRY** | 18.00 | 20.00 | 21.00 | 22.00 | 23.00 | 24.00 |
| **USD/ILS** | 3.50 | 3.45 | 3.40 | 3.35 | 3.35 | 3.35 |
| **EUR/PLN** | 4.80 | 4.90 | 4.70 | 4.60 | 4.46 | 4.32 |
| **EUR/CZK** | 25.0 | 25.2 | 25.0 | 24.8 | 25.5 | 26.1 |
| **EUR/HUF** | 420 | 405 | 390 | 380 | 375 | 369 |
| **DXY** | 112 | 110 | 108 | 106 | 104 | 101 |
| **Fed's Broad USD Index** | 127 | 124 | 123 | 121 | 120 | 118 |

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

**Exhibit 99:** Morgan Stanley foreign exchange Base, Bear, Bull scenarios

| 2Q23 | Bear | Base | Bull |
|---|---|---|---|
| **EUR/USD** | 0.97 | 1.03 | 1.07 |
| **GBP/USD** | 1.13 | 1.20 | 1.25 |
| **USD/JPY** | 132 | 138 | 141 |
| **AUD/USD** | 0.62 | 0.69 | 0.72 |
| **USD/CNY** | 6.35 | 6.50 | 6.80 |
| **USD/INR** | 72.0 | 77.0 | 79.0 |
| **USD/ZAR** | 14.5 | 17.3 | 15.3 |
| **USD/BRL** | 5.20 | 5.35 | 5.70 |
| **USD/MXN** | 19.00 | 20.70 | 21.50 |

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 |
|---|---|---|---|---|
| 10s30s EUR Steepeners | -14bp | 22-Jul-22 | We think that any move flatter in the money market will re-steepen 10s30s. | The main risk for the trade would be a sharp steepening of the money market curve, which would push the fair value toward or below the current market level. |
| Long 1E 39 vs. 4Q 32 and 1Q 51 | 57.5bp | 22-Jul-22 | We think the closing of short futures positions, real money buying 30y paper, and recent security-specific cheapening will prove transitory. This would allow the fly to return to its correlation-implied levels with rates. | A continuation of buying around the 10y sector, which would make 20y paper lag. |
| Long UKT 1E 39 vs. UKT 0H 61 | -23.2bp | 22-Jul-22 | We suspect that the strength in the 30y sector may face headwinds, including increased supply and QE. | The continuation of acute market volatility, which could keep the curve distorted. |
| Sept 149/147/146 Bund broken put fly | 18 cents | 22-Jul-22 | We think the bear market rally is overdue and the Bund retraced to expensive valuations. | The risk of the position is limited to the premium engaged, while the profit would reach its maximum at expiry at 147 to fall back to 1 point minus the premium below 146. |
| Pay EUR 2s5s10s (vs 6M) | 1.40bp | 8-Jul-22 | We think that the move on 2s5s10s due to the flattening in the strip has become asymmetric and the fly should cheapen, while the strip should re-steepen from here. | The move strip flattening takes longer to correct than expected. |
| Conditional Bund ASW widener | Buy 150.50, sell strike 1.95% | 10-Jun-22 | Bund ASW is 10bp cheap vs. our ASW model and Bund volatility is very low vs. the swaption, making the conditional trade attractive. | A rally with a tighter ASW. |
| Buy IL31 | -1.87 | 9-Jun-22 | Bund ASW is 10bp cheap vs. our ASW model and Bund volatility is very low vs. the swaption, which makes the conditional trade attractive. | The risk to being long IL31 is a potentially less accommodative June BoE meeting, which could lead to a bear-flattening of the UK real yield curve. |
| Short BAZ2 | 5-Apr-00 | 3-Jun-22 | We think investors will increasingly expect 75bp hikes from the BoC as oil prices remain supported and the BoC is likely to sound hawkish ahead of the September meeting. | A significant decline in Canadian CPI. |

| TRADE | ENTRY LEVEL | ENTRY DATE | RATIONALE | RISKS |
|---|---|---|---|---|
| Long June 2023 FRA/€STR basis | 19.7 | 20-May-22 | The prospects of a further cheapening on iTraxx crossover and the June 23 TLTRO repayments should lead to a wider basis. | The announcement of another extension of 3y TLTROs and an extension of APP. |
| TONA OIS 5s20s steepener (DV01 neutral) | 68bp | 29-Jul-22 | Longer tenors should have room to steepen given the dovish global market pricing and the subsequent recovery in global risk sentiment. | A risk-off move, with a subsequent bull-flattening of the curve. |
| Buy 30y OAT vs BTP | 139 | 10-May-22 | Lower excess liquidity, an end of APP in H2, and an attractive valuation of OATs for Asian investors would lead to a protracted spread widening. | The key risk to the trade is an extension of APP. |
| Receive EUR 5y5y inflation swap | 2.3 | 10-May-22 | With the gradual tightening approach, ECB would be seen as behind the curve, increasing the demand for inflation protection. | Risks to the trade include a 50bp hike by the ECB in order to speed up the normalization process. |
| Shift from JGB 10s-20s steepener (DV01 ratio 2 vs 1) to DV01 neutral | 65bp | 18-Jun-22 | 10y yield will likely be capped by the BoJ's unlimited purchase operation, while the 20y JGB yield will likely be vulnerable for any global yield sell-off without banks' demand. | The main risk to this trade is that of the curve bull-flattening more dramatically due to banks ramping up their net purchases again. |
| Receiving Sep-22 MPC OIS | 0.0168 | 18-Mar-22 | We think the current pricing is excessive vs. BoE's guidance | The data support a faster tightening. |
| NZ 1y5y OIS Flattener | 79bp | 18-Mar-22 | The RBNZ continuing to normalize despite softening data should lead to curve inversion. | The RBNZ turns dovish in response to weak data, generating a steeper curve. |
| Pay fixed EUR 10y10y swap | 55bp | 14-Nov-21 | The prospect of stickier eurozone inflation in 2H22, and a higher term premium due to the end of APP should all contribute to duration weakness. A repricing of the 10s20s and 10s30s with the short end anchored would lead to both higher yields and steeper curves. | A more dovish ECB, higher pace of APP purchases. |

**Currency and Foreign Exchange**

| TRADE | ENTRY LEVEL | ENTRY DATE | RATIONALE | RISKS |
|---|---|---|---|---|
| Short EUR/USD | 1.015 | 8-Jul-22 | EUR/USD should decline as concerns over global growth persist and elevated inflation prompts continued increases in US rates, supporting the USD. | Inflation begins to show signs of slowing, reducing Fed policy expectations and weighing on the USD. |
| Long CHF/NOK | 10.350 | 8-Jul-22 | We expect the CHF's strength to persist. The options market is quite short EUR/CHF at the moment, but more medium-term asset managers have been increasing their short CHF positions following the June SNB meeting, according to CFTC data. The European growth outlook is looking more grim with recession concerns in the spotlight. Our equity strategists also expect the equity bear market to continue, keeping NOK risks to the downside over coming weeks. | A meaningful rally in risk assets. |
| Long 3m USD/JPY seagulls (buy 3m ATMF/140 call spread, sell 128 put) | 0.7% P | 27-Jun-22 | Risks for the JPY remain skewed to the downside, in our view, against USD. We are, however, less convinced that the recent pace of depreciation will be maintained, as JPY short positioning has become crowded in both the options and futures markets. JPY implied volatility has picked up recently to new post-Covid highs, and it is the most expensive across G10 in our idiosyncratic risk premium model. This makes selling OTM puts an effective way to cheapen the cost of USD/JPY upside exposure. | A fall in US yields as global growth concerns intensify; improvement in Japan's trade balance if commodity prices fall. |

| TRADE | ENTRY LEVEL | ENTRY DATE | RATIONALE | RISKS |
|---|---|---|---|---|
| Short AUD/CAD | 0.902 | 20-May-22 | CAD has historically traded closely in line with oil prices, and we expect the recent rise to pass through to a stronger CAD. Canadian yields are relatively high, and our colleagues in economics expect the BoC to end 2022 with one of the highest policy rates in the G10. We expect a strong Canadian net immigration outlook to continue to boost payrolls, housing valuations, and overall growth. Meanwhile, market pricing for the RBA is one of the most stretched curves within G10. | The key risks to the trade are a sustained drop in oil prices. |
| **Inflation-Linked Bonds** | | | | |
| **TRADE** | **ENTRY LEVEL** | **ENTRY DATE** | **RATIONALE** | **RISKS** |
| Long July '24 TIPS BE vs. short July '23 TIPS BE | 281bp | 7/29/2022 | We see inflation being stickier and more persistent than current market pricing suggests. We believe that present levels represent an attractive entry point. | Shock to inflation results in CPI dropping faster than anticipated |
| Long 1y1y CPI swap | 277bp | 7/15/2022 | We see inflation being stickier and more persistent than current market pricing suggests. We believe that present levels represent an attractive entry point. | Shock to inflation results in CPI dropping faster than anticipated |
| Buy OATei24 vs FRTR2.25 5/24 | 373bp | 7/18/2022 | We think flows should support wider front-end BEs, hence our long position in OATei24 BE. Carry is also supportive for front-end OATeis, resulting in accommodative BE until August. | A drop in commodities that will push overall BEs lower, especially at the front-end. |
| Buy 5y UK RPI swap | 4.26% | 24-Jun-22 | We expect more inflation premium to be priced into the front end of UK inflation forwards due to sticky inflation. | A fall in commodities that would weigh on all short-dated inflation instruments, including the 5y RPI forward. |
| **Short-Duration Strategy** | | | | |
| **TRADE** | **ENTRY LEVEL** | **ENTRY DATE** | **RATIONALE** | **RISKS** |
| TONA/SOFR basis 2s10s20s fly | -6.8bp | 13-May-22 | Global growth concerns and a subsequently wider credit spread would likely lead to further widening pressure in the belly of the curve, while we expect the widening pressure on both the short and long ends to likely be offset by the demand for foreign CCY JGB ASW from overseas real money investors. | Safe haven USD demand leads to strong widening pressure on the front end. |
| Interest Rate Derivatives | | | | |
| Trade | Entry Level | Entry Date | Rationale | Risks |
| Sell 3m10y ATMF straddle vs buying 3m10y AMTF-50/ATMF+50 strangle | -2.45% (i.e. premium earned) | 13-May-22 | We believe that, with the Fed now actively considering 75bp hikes, gamma has probably reached a peak, so we prefer to sell at these levels. However, we don't want unlimited downside exposure, so we use relatively cheaper vol smile to our advantage and buy wingy options to protect the downside. | The main risk are if rates move away from ATMF by more than 30bp in each direction and the trade begins to move into negative territory. |
| Buy 2y2s30s curve floor spread, struck at ATMF/ATMF-75 (-4bp/-79bp) | 26bp | 13-May-22 | This trade complements our more structural flatteners, while taking advantage of (1) relatively cheaper 2y2s30s curve vol, (2) positive vol roll, and (3) positive delta roll. | The main risk to this trade is that the curve steepens further, in which case the premium would be lost. |
| Buy 20y JGB ASW vs ESTR compound | 78bp | 13-May-22 | This is a medium-term carry trade. EUR-denominated JGBs on the long end provide attractive yield pickup vs. Bunds ASW with a matched maturity. | Significant widening of the JPY/EUR basis on the longer end on the back of a credit crunch; low demand for 20y JGB ASW from the banking community. |

| | | | | |
|---|---|---|---|---|
| Buy 6m5s30s conditional bull steepeners, constructed by buying 6m5y receivers in 1x notional struck at ATMF - 20 (1.63%) and selling 6m30y receivers in 0.24x notional struck at ATMF - 22 (1.71%) | 0c | 28-Jan-22 | We find this trade to be an attractive hedge for our 5s30s flatteners. Given how flat forwards are priced, this trade carries positively in the rate space. Also, we find the difference between receiver skew in 5y and 30y tails to be attractive for owning downside in 5y tails and selling downside in 30y tails to fund that position. | The main risk to this trade is if the curve were to bull flatten. |
| ZTIBOR-OIS 5s20s flattener | 11bp | 9-Apr-21 | ZTIBOR are expected to discontinue in Dec-2024, and we expect the market to start to price in the expected fallback spread. | Another loan swap hedge-related paying in the long end. |

**Exhibit 100:** History of recommendations

**EUR 5s30s Swap Flattener**

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|
| EUSA10 Curncy | 19-Oct-31 | Receive 5s10s30s Eur Swap Fly | 15-Oct-21 | 0.22% | 29-Oct-21 | 0.28% | | | | EUSA10 Curncy |
| EUSA5 Curncy | 19-Oct-26 | Receive 5s10s30s Eur Swap Fly | 15-Oct-21 | -0.13% | 29-Oct-21 | 0.02% | | | | EUSA5 Curncy |
| EUSA30 Curncy | 19-Oct-51 | Receive 5s10s30s Eur Swap Fly | 15-Oct-21 | 0.51% | 29-Oct-21 | 0.34% | | | | EUSA30 Curncy |
| 5y PLN IRS | 8-Feb-27 | Receive 5y PLN IRS vs. Pay 5y EUR IRS | 08-Feb-22 | 3.50 | 21-Mar-22 | 3.8 | | | | PZSW5 Curncy |
| 5y EUR IRS | 8-Feb-27 | Receive 5y PLN IRS vs. Pay 5y EUR IRS | 08-Feb-22 | 3.50 | 21-Mar-22 | 3.8 | | | | EUSA5 Curncy |
| Interest Rate Swap | 5Y | Receive PLN 5yr versus EUR 5yr | 21-Feb-22 | 0.04 | 25-Mar-22 | 0.0528 | | | | PZSW5 Curncy |
| Interest Rate Swap | 5Y | Receive PLN 5yr versus EUR 5yr | 21-Feb-22 | 0.01 | 25-Mar-22 | 0.00807 | | | | EUSA5 Curncy |
| EUR Annual (vs 6M Euribor) | 8-Apr-27 | EUR 2s5s Steepeners | 08-Apr-22 | 1.15 | 22-Apr-22 | 1.399 | | | | EUSA5 BGN Curncy |
| EUR Annual (vs 6M Euribor) | 8-Apr-24 | EUR 2s5s Steepeners | 08-Apr-22 | 0.68 | 22-Apr-22 | 0.89 | | | | EUSA2 BGN Curncy |
| 10y swap EUR 6M | 7-Jun-32 | EUR 10s30s swap flattener | 03-Jun-22 | 1.8 | 17-Jun-22 | 2.44 | | | | EUSA10 Curncy |
| 30y swap EUR 6M | 7-Jun-52 | EUR 10s30s swap flattener | 03-Jun-22 | 1.91 | 17-Jun-22 | 2.15 | | | | EUSA30 curncy |

**Pay Fixed EUR 10y10y Swap**

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|
| USD Forward Start Semi annual 30/360 vs 3M Libor) | 3-Mar-42 | Receive US 10y10y vs EUR 10y10y | 01-Mar-22 | 0.02 | 21-Mar-22 | 2.50% | | | | USFS1010 Curncy |
| EUR Forward Start v 6M | 3-Mar-42 | Receive US 10y10y vs EUR 10y10y | 01-Mar-22 | 0.01 | 21-Mar-22 | 1.32% | | | | EUSA1010 Curncy |
| EUR Forward | 10Y | Pay EUR 10y10y | 14-Nov-21 | 0.54% | 28-Mar-22 | 1.25% | 1.00% | | | EUSA1010 Index |

**Buy OAT 30y versus BTP**

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|
| BTPS 2.15 09/01/2052 | 1-Sep-52 | Short BTP Sep 2052 vs long SPGB Jul 2066 | 18-Mar-22 | 0.02 | 22-Apr-22 | 3.08 | | | | IT0005480980 |
| SPGB 3.45 07/30/2066 | 30-Jul-66 | Short BTP Sep 2052 vs long SPGB Jul 2066 | 18-Mar-22 | 0.02 | 22-Apr-22 | 2.72 | | | | ES00000128E2 |

**Conditional Bund ASW Widener**

| 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 Spread RX1 vs 6M | | Buy Bund ASW vs Schatz | 15-Oct-21 | 40.33bp | 05-Nov-21 | 40.22 | | | | ASWABUND BGN Curncy |
| EUR Spread DU1 vs 6M | | Buy Bund ASW vs Schatz | 15-Oct-21 | 28.11bp | 05-Nov-21 | 34.52 | | | | ASWASHATZ BGN Curncy |

**Pay EUR 2s5s10s**

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|
| EUSA10 Curncy | 19-Oct-31 | Receive 5s10s30s Eur Swap Fly | 15-Oct-21 | 0.22% | 29-Oct-21 | 0.28% | | | | EUSA10 Curncy |
| EUSA5 Curncy | 19-Oct-26 | Receive 5s10s30s Eur Swap Fly | 15-Oct-21 | -0.13% | 29-Oct-21 | 0.02% | | | | EUSA5 Curncy |
| EUSA30 Curncy | 19-Oct-51 | Receive 5s10s30s Eur Swap Fly | 15-Oct-21 | 0.51% | 29-Oct-21 | 0.34% | | | | EUSA30 Curncy |
| SPGB 0.1 04/30/31 | 30-Apr-31 | Short Bono Apr 31 ASW | 22-Oct-21 | 0.46% | 14-Jan-22 | 0.53% | | | | ES0000012H41 |
| EUR Annual (vs 6m Euribor) | 26-Oct-31 | Short Bono Apr 31 ASW | 22-Oct-21 | 0.29% | 14-Jan-22 | 0.36% | | | | EUSA10 Curncy |
| SPGB 1.3 10/31/2026 | 31-Oct-24 | Short Bono Oct 2026 ASW | 14-Jan-22 | -0.27% | 25-Mar-22 | 0.62% | | | | ES00000128H5 |
| EUR Annual (vs 6m Euribor) | 20-Jan-32 | Short Bono Oct 2026 ASW | 14-Jan-22 | 0.36% | 25-Mar-22 | 1.18% | | | | EUSA10 Curncy |
| 5y PLN IRS | 8-Feb-27 | Receive 5y PLN IRS vs. Pay 5y EUR IRS | 08-Feb-22 | 3.50 | 21-Mar-22 | 3.8 | | | | PZSW5 Curncy |
| 5y EUR IRS | 8-Feb-27 | Receive 5y PLN IRS vs. Pay 5y EUR IRS | 08-Feb-22 | 3.50 | 21-Mar-22 | 3.8 | | | | EUSA5 Curncy |
| Interest Rate Swap | 5Y | Receive PLN 5yr versus EUR 5yr | 21-Feb-22 | 0.04 | 25-Mar-22 | 0.0528 | | | | PZSW5 Curncy |
| Interest Rate Swap | 5Y | Receive PLN 5yr versus EUR 5yr | 21-Feb-22 | 0.01 | 25-Mar-22 | 0.00807 | | | | EUSA5 Curncy |
| EUR Annual (vs 6M EURIBOR) | 11-Mar-32 | pay GBP 10y swap vs EUR 10y swap | 11-Mar-22 | 0.01 | 29-Apr-22 | 0.0168 | | | | EUSA10 Curncy |
| GBP Swap OIS | 11-Mar-32 | pay GBP 10y swap vs EUR 10y swap | 11-Mar-22 | 0.02 | 29-Apr-22 | 0.0189 | | | | BPSWS10 Curncy |
| Interest Rate Swap | 10Y | Receive EUR 10yr vs. GBP 10yr | 25-Mar-22 | 1% | 10-May-22 | 1.96% | | | | EUSA10 Curncy |
| Interest Rate Swap | 10Y | Receive EUR 10yr vs. GBP 10yr | 25-Mar-22 | 2% | 10-May-22 | 2.04% | | | | BPSWS10 Curncy |
| EUR Annual (vs 6M Euribor) | 8-Apr-27 | EUR 2s5s Steepeners | 08-Apr-22 | 1.15 | 22-Apr-22 | 1.399 | | | | EUSA5 BGN Curncy |
| EUR Annual (vs 6M Euribor) | 8-Apr-24 | EUR 2s5s Steepeners | 08-Apr-22 | 0.68 | 22-Apr-22 | 0.89 | | | | EUSA2 BGN Curncy |
| 10y swap EUR 6M | 7-Jun-32 | EUR 10s30s swap flattener | 03-Jun-22 | 1.8 | 17-Jun-22 | 2.44 | | | | EUSA10 Curncy |
| 30y swap EUR 6M | 7-Jun-52 | EUR 10s30s swap flattener | 03-Jun-22 | 1.91 | 17-Jun-22 | 2.15 | | | | EUSA30 curncy |

**Buy 1E 39 versus 4Q 32 and 1Q 51**

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|
| UKT 1Q 51 | 31-Jul-51 | Buy UKT 1Q 51 vs UKT 1F 71 | 24-May-22 | -0.23% | 20-Jul-22 | -0.15% | | | | GB00BLH38158 |
| UKT 1F 71 | 22-Oct-71 | Buy UKT 1Q 51 vs UKT 1F 71 | 24-May-22 | -0.23% | 20-Jul-22 | -0.15% | | | | GB00BFMCN652 |

**EUR 10s30s Steepener**

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|
| EUSA10 Curncy | 19-Oct-31 | Receive 5s10s30s Eur Swap Fly | 15-Oct-21 | 0.22% | 29-Oct-21 | 0.28% | | | | EUSA10 Curncy |
| EUSA5 Curncy | 19-Oct-26 | Receive 5s10s30s Eur Swap Fly | 15-Oct-21 | -0.13% | 29-Oct-21 | 0.02% | | | | EUSA5 Curncy |
| EUSA30 Curncy | 19-Oct-51 | Receive 5s10s30s Eur Swap Fly | 15-Oct-21 | 0.51% | 29-Oct-21 | 0.34% | | | | EUSA30 Curncy |
| SPGB 0.1 04/30/31 | 30-Apr-31 | Short Bono Apr 31 ASW | 22-Oct-21 | 0.46% | 14-Jan-22 | 0.53% | | | | ES0000012H41 |
| EUR Annual (vs 6m Euribor) | 26-Oct-31 | Short Bono Apr 31 ASW | 22-Oct-21 | 0.29% | 14-Jan-22 | 0.36% | | | | EUSA10 Curncy |
| SPGB 1.3 10/31/2026 | 31-Oct-24 | Short Bono Oct 2026 ASW | 14-Jan-22 | -0.27% | 25-Mar-22 | 0.62% | | | | ES00000128H5 |
| EUR Annual (vs 6m Euribor) | 20-Jan-32 | Short Bono Oct 2026 ASW | 14-Jan-22 | 0.36% | 25-Mar-22 | 1.18% | | | | EUSA10 Curncy |
| EUR Annual (vs 6M EURIBOR) | 11-Mar-32 | pay GBP 10y swap vs EUR 10y swap | 11-Mar-22 | 0.01 | 29-Apr-22 | 0.0168 | | | | EUSA10 Curncy |
| GBP Swap OIS | 11-Mar-32 | pay GBP 10y swap vs EUR 10y swap | 11-Mar-22 | 0.02 | 29-Apr-22 | 0.0189 | | | | BPSWS10 Curncy |
| Interest Rate Swap | 10Y | Receive EUR 10yr vs. GBP 10yr | 25-Mar-22 | 1% | 10-May-22 | 1.96% | | | | EUSA10 Curncy |
| Interest Rate Swap | 10Y | Receive EUR 10yr vs. GBP 10yr | 25-Mar-22 | 2% | 10-May-22 | 2.04% | | | | BPSWS10 Curncy |
| 10y swap EUR 6M | 7-Jun-32 | EUR 10s30s swap flattener | 03-Jun-22 | 1.8 | 17-Jun-22 | 2.44 | | | | EUSA10 Curncy |
| 30y swap EUR 6M | 7-Jun-52 | EUR 10s30s swap flattener | 03-Jun-22 | 1.91 | 17-Jun-22 | 2.15 | | | | EUSA30 curncy |

**Buy UKT 1E 39 versus UKT 0H 61**

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|
| UKT 0 1/2 10/22/61 | 22-Oct-61 | Buy UKT 0H 61 on ASW | 13-May-22 | 1.84 | 28-Jul-22 | 2.407 | | | | GB00BMBL1D50 |
| 40y SONIA swap | 5-May-24 | Buy UKT 0H 61 on ASW | 13-May-22 | 1.55 | 28-Jul-22 | 2.11 | | | | BPSWS40 Curncy |

**Buy 3m USD/JPY Seagulls (Buy 3m ATMF/135 Call Spread, Sell 124 Put)**

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|
| USD/JPY | 3m | Long USD/JPY outright with selling 3m USD/JPY call at 112.50 | 19-Jun-21 | 100.20 (0.4% for call option) | 20-Sep-21 | 0.0% | | | | USDJPY Curncy |
| USD/JPY | 3m | Buy 3m USD/JPY seagulls (buy 3m ATMF/135 call spread, sell 124 put) | 25-Apr-22 | 0.69% P | 28-Jun-22 | 3.75% P | | | | USDJPY CURNCY |

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.

For important disclosures related to the proportion of all investment recommendations over the past 12 months that fit each of the categories defined above, and the proportion of issuers corresponding to each of those categories to which Morgan Stanley has supplied material services, please see the Morgan Stanley disclosure at https://ny.matrix.ms.com/eqr/article/webapp/81c33698-06b0-11ed-a95a-800d82b59ab4

# Event Calendar

**Exhibit 101:** Risk Event Calendar

| Date | Time (Ldn) | Ccy | Event | Ref. Period | Market | Previous |
|---|---|---|---|---|---|---|
| 31-Jul | 02:30 | CNY | Composite PMI | Jul | | 54.1 |
| | 02:30 | CNY | Manufacturing PMI | Jul | 50.3 | 50.2 |
| | 02:30 | CNY | Non-manufacturing PMI | Jul | 53.9 | 54.7 |
| | 15:00 | AUD | Corelogic House Prices (MoM) | Jul | | -0.8% |
| | 18:00 | NZD | Corelogic House Prices (YoY) | Jul | | 12.4% |
| | 23:45 | NZD | Building Permits (MoM) | Jun | | -0.5% |
| 01-Aug | 00:00 | AUD | PMI Manufacturing | Jul F | | 55.7 |
| | 01:00 | KRW | Exports (YoY) | Jul | 10% | 5.2% |
| | 01:30 | THB | Thailand PMI | Jul | | 50.7 |
| | 01:30 | MYR | Malaysia PMI | Jul | | 50.4 |
| | 01:30 | PHP | Philippines PMI | Jul | | 53.8 |
| | 01:30 | JPY | PMI Manufacturing | Jul F | | 52.2 |
| | 02:45 | CNY | Caixin PMI Manufacturing | Jul | 51.5 | 51.7 |
| | 05:00 | IDR | CPI (YoY) | Jul | 4.82% | 4.35% |
| | 07:00 | EUR | German Retail Sales (MoM) | Jun | 0.4% | 1.2% |
| | 07:30 | SEK | Manufacturing PMI | Jul | | 54.6 |
| | 08:15 | EUR | Spanish PMI Manufacturing | Jul | 50 | 52.6 |
| | 08:45 | EUR | Italian PMI Manufacturing | Jul | 49 | 50.9 |
| | 08:50 | EUR | French PMI Manufacturing | Jul F | 49.6 | 49.6 |
| | 08:55 | EUR | German PMI Manufacturing | Jul F | 49.2 | 49.2 |
| | 09:00 | EUR | PMI Manufacturing | Jul F | 49.6 | 49.6 |
| | 09:00 | NOK | Manufacturing PMI | Jul | | 56.39 |
| | 09:00 | EUR | Italian Unemployment Rate | Jun | 8.1 | 8.14 |
| | 09:30 | HKD | GDP (YoY) | 2Q A | 0.2% | -4% |
| | 09:30 | GBP | PMI Manufacturing | Jul F | 52.2 | 52.2 |
| | 10:00 | EUR | Unemployment Rate | Jun | 6.6% | 6.6% |
| | 13:30 | CLP | Economic Activity (YoY) | Jun | | 6.4% |
| | 14:45 | USD | PMI Manufacturing | Jul F | 52.4 | 52.3 |
| | 15:00 | USD | Construction Spending (MoM) | Jun | 0.2% | -0.1% |
| | 15:00 | USD | ISM Manufacturing | Jul | 52.1 | 53 |
| | 16:00 | PEN | CPI (MoM) | Jan | | 1.19% |
| | 19:00 | USD | Fed Senior Loan Officer Survey | | | |
| 02-Aug | 00:00 | KRW | CPI (YoY) | Jul | 6.3% | 6% |
| | 00:50 | JPY | Monetary Base (YoY) | Jul | | 3.9% |
| | 00:50 | JPY | Monetary Base End of Period | Jul | | 677.4B |
| | 02:30 | AUD | Home Loans (MoM) | Jun | -3% | 1.7% |
| | 02:30 | AUD | Owner-Occupier Home Loans (MoM) | Jun | -3% | 2.1% |
| | 02:30 | AUD | Building Approvals (MoM) | Jun | -5% | -1.1% |
| | 05:30 | AUD | RBA Rates Decision | | 1.85% | 1.35% |
| | 07:00 | GBP | Nationwide House Prices (MoM) | Jul | 0.3% | 0.3% |

| | 07:30 | AUD | Commodity Index (YoY) | Jul | | 24.3% |
|---|---|---|---|---|---|---|
| | 08:30 | CHF | Manufacturing PMI | Jul | 56.3 | 59.1 |
| | 09:00 | CHF | SNB Sight Deposits | | | 746.6B |
| | N/A | NZD | Global Dairy Trade Announces Milk Auction Results | | | |
| | 14:30 | CAD | PMI Manufacturing | Jul | | 54.6 |
| | 15:00 | USD | Fed's Evans (non-voter) spks | | | |
| | 15:00 | USD | JOLTs Job Openings | Jun | 10.99m | 11.25m |
| | 18:00 | NZD | Corelogic House Prices (YoY) | Jul | | 12.4% |
| | 22:00 | KRW | Foreign Reserves | Jul | | 438.28B |
| | 23:45 | USD | Fed's Bullard (voter) spks | | | |
| | 23:45 | NZD | Unemployment Rate | 2Q | 3.1% | 3.2% |
| | 23:45 | NZD | Employment Change (QoQ) | 2Q | 0.4% | 0.1% |
| | N/A | USD | Total Vehicle Sales | Jul | 13.5m | 13m |
| 03-Aug | 00:00 | AUD | PMI Composite | Jul F | | 50.6 |
| | 00:00 | AUD | PMI Services | Jul F | | 50.4 |
| | 01:30 | JPY | PMI Services | Jul F | | 51.2 |
| | 01:30 | JPY | PMI Composite | Jul F | | 50.6 |
| | 01:30 | SGD | Singapore PMI | Jul | | 57.5 |
| | 02:00 | NZD | ANZ Commodity Price | Jul | | -0.4% |
| | 02:10 | JPY | BoJ Outright Bond Purchase 1-3y, 3-5y, 10-25y | | | |
| | 02:45 | CNY | PMI Composite | Jul | | 55.3 |
| | 02:45 | CNY | PMI Services | Jul | 54 | 54.5 |
| | 07:00 | EUR | German Exports (MoM) | Jun | 1% | 1.6% |
| | 07:00 | EUR | German Imports (MoM) | Jun | 1.3% | 3.5% |
| | 07:30 | SEK | PMI Services | Jul | | 62.8 |
| | 07:30 | CHF | CPI (YoY) | Jul | 3.4% | 3.4% |
| | 07:30 | CHF | Core CPI (YoY) | Jul | 2% | 1.9% |
| | 08:00 | TRY | CPI (YoY) | Jul | 80.2% | 78.62% |
| | 08:15 | EUR | Spanish PMI Services | Jul | 52 | 54 |
| | 08:45 | EUR | Italian PMI Services | Jul | 50 | 51.6 |
| | 08:45 | EUR | Italian PMI Composite | Jul | 49.6 | 51.3 |
| | 08:50 | EUR | French PMI Services | Jul F | 52.1 | 52.1 |
| | 08:55 | EUR | German PMI Services | Jul F | 49.2 | 49.2 |
| | 09:00 | EUR | PMI Services | Jul F | 50.6 | 50.6 |
| | 09:00 | EUR | PMI Composite | Jul F | 49.4 | 49.4 |
| | 09:00 | EUR | Italian Retail Sales (MoM) | Jun | | 1.85% |
| | 09:30 | GBP | PMI Services | Jul F | 53.3 | 53.3 |
| | 09:30 | GBP | PMI Composite | Jul F | 52.8 | 52.8 |
| | 10:00 | EUR | PPI (YoY) | Jun | 35.7% | 36.3% |
| | 10:00 | EUR | Retail Sales (MoM) | Jun | 0% | 0.2% |
| | N/A | INT | OPEC+ Meeting | | | |
| | 14:45 | USD | PMI Services | Jul F | 47.1 | 47 |
| | 15:00 | USD | Factory Orders | Jun | 0.9% | 1.6% |
| | 15:00 | USD | ISM Non-Manufacturing Composite | Jul | 53.9 | 55.3 |
| | 15:00 | USD | Durable Goods Orders | Jun F | | 1.9% |
| | 15:00 | USD | Durables Ex Transportation | Jun F | | 0.3% |
| | 15:30 | USD | EIA Crude Oil Inventories | | | -4523k |
| | 22:30 | BRL | COPOM Rates Decision | | 13.75% | 13.25% |

| | | | | | | |
|---|---|---|---|---|---|---|
| 04-Aug | 00:50 | JPY | Japan MoF Weekly Security Flow | | | 230.6B |
| | 02:30 | AUD | Trade Balance | Jun | 14000m | 15965m |
| | 02:30 | AUD | Exports (MoM) | Jun | 0% | 9.5% |
| | 02:30 | AUD | Imports (MoM) | Jun | 3.2% | 5.8% |
| | 07:00 | EUR | German Factory Orders (MoM) | Jun | -0.7% | 0.1% |
| | 07:00 | NOK | Credit Indicator Growth (YoY) | Jun | | 4.8% |
| | 08:00 | HUF | NBH 1-week Deposit Rate | | | 10.75% |
| | 09:30 | GBP | PMI Construction | Jul | 52.2 | 52.6 |
| | 12:00 | GBP | BoE Rates Decision | | 1.75% | 1.25% |
| | 12:00 | GBP | BoE Monetary Policy Report | | | |
| | 12:30 | GBP | BoE Press Conference | | | |
| | 13:30 | USD | Trade Balance | Jun | -81.5B | -85.5B |
| | 13:30 | CZK | CNB Rates Decision | | 7.13% | 7% |
| | 13:30 | CAD | Trade Balance | Jun | 4.99B | 5.32B |
| | 13:30 | USD | Initial Jobless Claims | | | 256k |
| | 14:00 | GBP | BoE Decision Maker Panel Survey | | | |
| | 17:00 | USD | Fed’s Mester (voter) spks (Economic Outlook) | | | |
| 05-Aug | 00:30 | JPY | Overall Household Spending (YoY) | Jun | 1.5% | -0.5% |
| | 00:30 | JPY | Labor Cash Earnings (YoY) | Jun | 1.9% | 1% |
| | 02:00 | PHP | CPI (YoY) | Jul | 6.1% | 6.1% |
| | 02:30 | AUD | RBA Statement of Monetary Policy | | | |
| | 04:00 | IDR | Foreign Reserves | Jul | | 136.4B |
| | 04:30 | THB | CPI (YoY) | Jul | 7.8% | 7.66% |
| | 05:00 | IDR | GDP (YoY) | 2Q | 5.2% | 5.01% |
| | 05:30 | INR | RBI Rates Decision | | 5.4% | 4.9% |
| | 06:00 | JPY | Leading Index CI | Jun P | | 101.2 |
| | 06:00 | JPY | Coincident Index | Jun P | | 94.9 |
| | 07:00 | EUR | German Industrial Production (MoM) | Jun | -0.2% | 0.2% |
| | 07:45 | EUR | French Trade Balance | Jun | | -13B |
| | 07:45 | EUR | French Industrial Production (MoM) | Jun | -0.2% | 0% |
| | 07:45 | EUR | French Wages (QoQ) | 2Q P | | 1.1% |
| | 08:00 | CHF | Foreign Currency Reserves | Jul | | 849B |
| | 08:00 | MYR | Foreign Reserves | | | 107B |
| | 08:00 | EUR | Spain Industrial Production (MoM) | Jun | 0% | -0.22% |
| | 09:00 | EUR | Italian Industrial Production (MoM) | Jun | -0.1% | -1.1% |
| | 09:00 | TWD | CPI (YoY) | Jul | 3.51% | 3.59% |
| | 09:20 | TWD | Foreign Reserves | Jul | | 548.96B |
| | N/A | RON | BNR Rates Decision | | 5.75% | 4.75% |
| | 12:00 | COP | CPI (MoM) | Jul | 0.63% | 0.51% |
| | 12:15 | GBP | BoE's Pill spks (Monetary Policy) | | | |
| | 13:30 | USD | Change in Nonfarm Payrolls | Jul | 250k | 372k |
| | 13:30 | USD | Unemployment Rate | Jul | 3.6% | 3.6% |
| | 13:30 | USD | Average Hourly Earnings (MoM) | Jul | 0.3% | 0.3% |
| | 13:30 | USD | Average Hourly Earnings (YoY) | Jul | 4.9% | 5.1% |
| | 13:30 | CAD | Employment Change | Jul | 18.1k | -43.2k |
| | 13:30 | CAD | Full Time Employment Change | Jul | | -4k |
| | 13:30 | CAD | Unemployment Rate | Jul | 5% | 4.9% |

| | | | | | | |
|---|---|---|---|---|---|---|
| | 15:00 | CAD | Ivey PMI | Jul | | 62.2 |
| | 20:00 | USD | Consumer Credit | Jun | 25B | 22.35B |
| 07-Aug | N/A | CNY | Foreign Reserves | Jul | | 3071.3B |
| | N/A | CNY | Trade Balance | Jul | | $97.94B |
| | N/A | CNY | Exports (YoY) | Jul | | 17.9% |
| | N/A | CNY | Imports (YoY) | Jul | | 1% |

Source: Morgan Stanley Research, Bloomberg

# Government Bond Ratings

**Exhibit 102:** 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 | | POS | | | | | | | | | | | | | | | |
| | 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 | | | | | | STA | | | | | | | | | | | |
| | Fitch | | | | | | | STA | | | | | | | | | | |
| ITA | Moody | | | | | | | | | | STA | | | | | | | |
| | S&P | | | | | | | | | STA | | | | | | | | |
| | Fitch | | | | | | | | | STA | | | | | | | | |
| IRE | Moody | | | | | POS | | | | | | | | | | | | |
| | S&P | | | | STA | | | | | | | | | | | | | |
| | Fitch | | | | STA | | | | | | | | | | | | | |
| POR | Moody | | | | | | | | | STA | | | | | | | | |
| | S&P | | | | | | | | | STA | | | | | | | | |
| | Fitch | | | | | | | | | POS | | | | | | | | |
| GRE | Moody | | | | | | | | | | | | | STA | | | | |
| | S&P | | | | | | | | | | | STA | | | | | | |
| | Fitch | | | | | | | | | | | | POS | | | | | |
| Australia | Moody | STA | | | | | | | | | | | | | | | | |
| | S&P | STA | | | | | | | | | | | | | | | | |
| | Fitch | STA | | | | | | | | | | | | | | | | |
| New Zealand | Moody | STA | | | | | | | | | | | | | | | | |
| | S&P | STA | | | | | | | | | | | | | | | | |
| | Fitch | | POS | | | | | | | | | | | | | | | |
| 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

# Global Macro Strategy Team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# Endnotes

1 Such as individuals leaving the labor force for childcare/education reasons or early retirement, people transitioning from one career to another, workers relocating from one region to another. Non-economic reasons motivating these decisions mean that higher wages may not incent additional labor supply as much as pre-COVID.

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| STOCK RATING CATEGORY | COVERAGE UNIVERSE COUNT | COVERAGE UNIVERSE % OF TOTAL | INVESTMENT BANKING CLIENTS (IBC) COUNT | IBC % OF TOTAL IBC | IBC % OF RATING CATEGORY | OTHER MATERIAL INVESTMENT SERVICES CLIENTS (MISC) COUNT | MISC % OF TOTAL OTHER MISC |
|---|---|---|---|---|---|---|---|
| **Overweight/Buy** | **1383** | **39%** | **320** | **42%** | **23%** | **595** | **39%** |
| **Equal-weight/Hold** | **1561** | **44%** | **353** | **46%** | **23%** | **715** | **47%** |
| **Not-Rated/Hold** | **0** | **0%** | **0** | **0%** | **0%** | **0** | **0%** |
| **Underweight/Sell** | **574** | **16%** | **87** | **11%** | **15%** | **215** | **14%** |
| **TOTAL** | **3,518** | | **760** | | | **1525** | |

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