Morgan Stanley | RESEARCH

IDEA

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Global Macro Strategist | Global

Seventy-Fives Stayin' Alive!

A third 75bp rate hike from the Fed should follow the first 75bp rate hike in ECB history. Our economists see the BoE hiking 50bp, but markets price some life into a 75bp hike. We stay in UST flatteners and short duration in Europe, add short Bunds vs. gilts, stay short EUR/USD, add short GBP/USD.

Global Macro Strategy

We flag that a potential rebound in US consumer confidence, now that retail gasoline prices have fallen, could keep Treasury yields elevated. We stay bullish USD near term, but we note four themes that may weigh on the USD in 2023. We also discuss why a weaker CNY adds to EM FX risks.

Interest Rate Strategy

We maintain 1s10s flatteners and short the June FOMC contract (FFN3). We keep the short duration trades (pay EUR 10y10y swap, long EUR 5y5y inflation swap and October 147/145/144 broken put fly). On the curve, we switched from the German 2s5s10s swap fly into the swap fly on September 5, and we keep the EUR 10s30s swap steepeners. On EGBs, we initiated a long Bund ASW on September 5; we keep our short 5y Spain, and 30y Italy versus OATs. We recommend buying 30y gilts vs 30y Bunds with an 80% beta as we think substantial fiscal news is already in gilt valuations. We recommend buying the green 10y gilt vs neighbouring bonds. We shift from DV01 neutral to DV01 2 vs 1 weight for JGB 10s20s steepener. We maintain long 10y JGB ASW and TONA OIS 5s20s steepener.

Currency & Foreign Exchange

USD strength should continue for the coming weeks, though we would be vigilant for currency-positive catalysts emerging toward 2023. Stay short EUR/USD and add long USD/CAD and short GBP/USD. A high proportion of inflation-linked bonds makes the UK's finances and GBP vulnerable in an inflationary environment. We find risks skewed towards a weaker NOK heading into year-end, and we discuss recent JPY weakness. We close our long USD/JPY via options.

Inflation-Linked Bonds

We continue to recommend long 1y1y, via zero coupon inflation swaps or Jul23 vs Jul24 breakevens. We analyze market's pricing of sticky inflation, and address why real yields haven't peaked yet.

Short-Duration Strategy

We examine this week's outperformance of front-end T-bills and continued repo "specialness" in the context of shifting market expectations on future rate hikes.

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Global Macro Strategy

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Lower Gas Prices, Higher Consumer Confidence, Higher Yields

This past week ended with quite a hawkish speech from Fed Governor Waller. It's worth quoting the three takeaways from his speech in full, with our emphasis in bold:

1. "First, inflation is far too high, and **it is too soon to say whether inflation is moving meaningfully and persistently downward.** The Federal Open Market Committee (FOMC) is committed to undertake actions to bring inflation back down to our 2 percent target. This is a fight we cannot, and will not, walk away from."

2. "The second takeaway is that the fears of a recession starting in the first half of this year have faded away and **the robust U.S. labor market is giving us the flexibility to be aggressive in our fight against inflation**. For that reason, I support continued increases in the FOMC's policy rate and, based on what I know today, I support a significant increase at our next meeting on September 20 and 21 to get the policy rate to a setting that is **clearly restricting demand**."

3. "The final takeaway is that I believe forward guidance is becoming less useful at this stage of the tightening cycle. Future decisions on **the size of additional rate increases and the destination for the policy rate in this cycle** should be solely determined by the incoming data and their implications for economic activity, employment, and inflation."

The first takeaway suggests that another soft inflation report, like the one our economists expect, won't be enough to dissuade Waller from voting for "a significant increase" in the fed funds range this month.

The second takeaway suggests that labor market strength is taking away some of the luster from the last, softer CPI and PCE reports, and might even dull the impact of another soft set of reports.

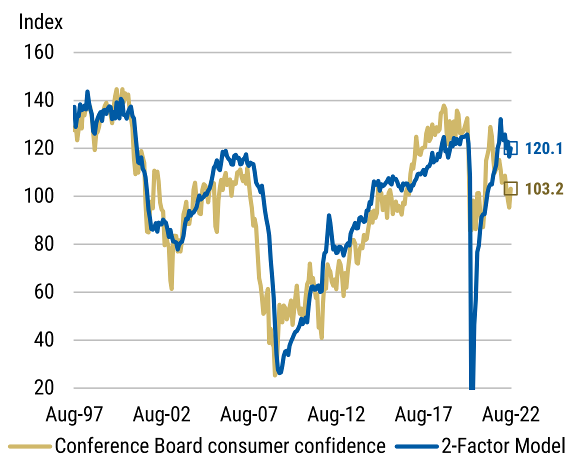
The third takeaway suggests that both the pace, *and peak*, of the hiking cycle will depend on incoming data. This hints at the idea that continued aggressive rate hikes may come with a higher peak policy rate - suggesting the September dot-plot may show a higher peak rate than in June, something our economists expect.

The activity data since the July FOMC meeting has been strong in general, but what about data beyond the September FOMC meeting? In their US retail sales tracker, our economists note that a decline in gas prices should support real discretionary spending that had softened due to energy and food price shocks.

Those food and energy price shocks must have lowered measures of consumer confidence beyond that which models would imply (see Exhibit 1). Our two-factor model for Conference Board consumer confidence had been overestimating confidence since late 2021 - just as food and gasoline prices were making new post-pandemic highs.

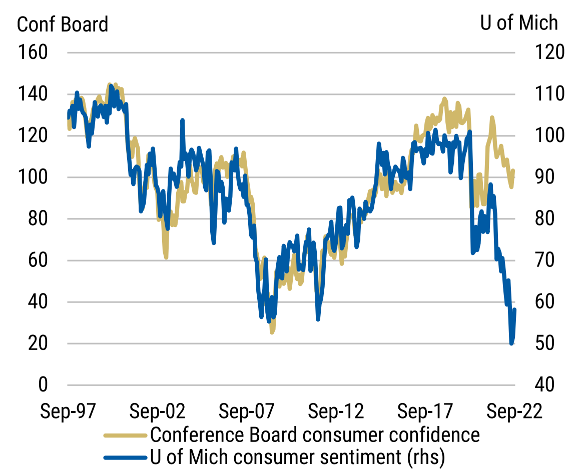
Indeed, the University of Michigan measure of consumer sentiment - which is more sensitive to CPI inflation - dramatically underperformed the Conference Board measure of consumer confidence, which is more sensitive to the labor market and risky asset performance (see Exhibit 2).

Exhibit 1: Conference Board consumer confidence vs. two-factor model estimate



Source: Morgan Stanley Research, BLS, Conference Board, Bloomberg

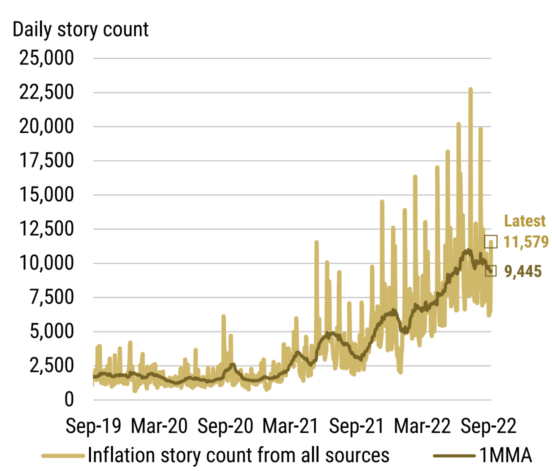
Exhibit 2: Conference Board consumer confidence vs. U of Michigan consumer sentiment



Source: Morgan Stanley Research, Conference Board, University of Michigan, Bloomberg

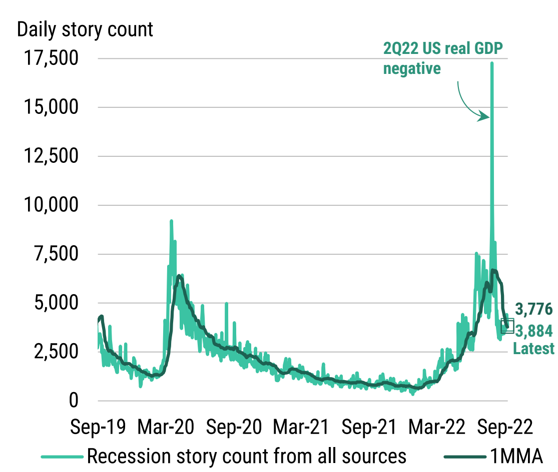
Actual inflation may not have been the only factor weighing on consumer sentiment. Media attention paid to inflation and a possible recession increased dramatically in 2022 (see Exhibit 3 and Exhibit 4). Not coincidentally, the number of news stories written on a US recession peaked when 2Q22 GDP confirmed a technical recession.

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



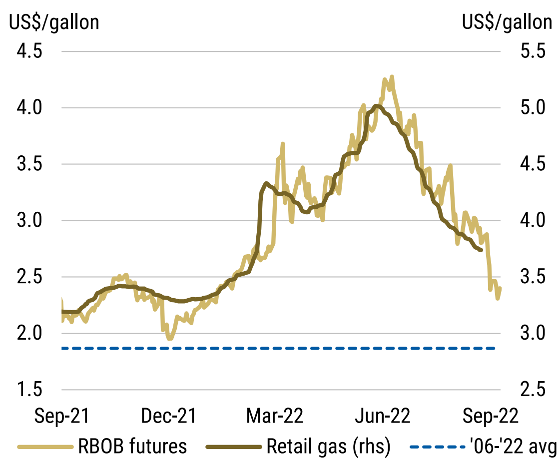
Source: : Morgan Stanley Research, Bloomberg NT <GO>

Into year end, media focus on recession could fade further, we think, in line with Waller's second takeaway that the fears of a recession have faded away. In addition, focus on inflation is likely to fade as headline CPI inflation decelerates. Those factors may boost consumer confidence, which have already begun to rise.

We also think lower retail gasoline prices, in addition to helping real discretionary spending, should boost consumer confidence further. RBOB futures suggest that US national retail unleaded gasoline prices should approach long-term averages around US$3/gallon soon (see Exhibit 5).

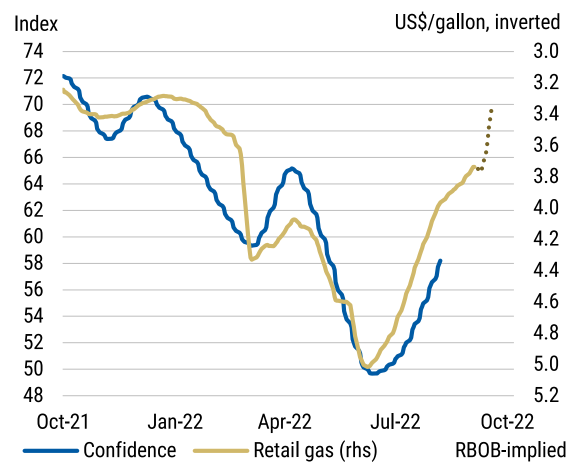
As Exhibit 6 suggests, such a decline in gasoline prices could boost consumer sentiment back to levels that existed in 4Q21. We think this type of improvement in consumer confidence could weigh on the Treasury market, especially in shorter maturities, given investors would likely contemplate an even higher peak policy rate.

Exhibit 5: RBOB gasoline front futures and daily US national average gasoline prices*



Source: Morgan Stanley Research, American Automobile Association, Bloomberg
* RBOB futures lead retail unleaded gas prices by ~2 weeks

Exhibit 6: Daily US national average gasoline prices, RBOB-implied prices, U of Michigan consumer sentiment*



Source: Morgan Stanley Research, University of Michigan, American Automobile Association, Bloomberg
* RBOB futures lead retail unleaded gas prices by ~2 weeks, retail unleaded gas prices lead confidence by ~4 weeks

USD | Stronger for Longer, But Not Stronger Forever

We think USD strength should continue for now and recommend short EUR/USD and GBP/USD positions. The two key criteria needed to see the USD peak and turn around (a bottoming in global growth and a peaking in Fed expectations) seem remote for the coming weeks. While global growth data continue to show signs of weakness, US data have remained robust, fueling an increase in Fed expectations.

Trade idea: Enter short GBP/USD at 1.159 with a target of 1.10, stop of 1.18
Trade idea: Maintain short EUR/USD at 1.005 with a target of 0.97, stop of 1.05

We remind investors to remain vigilant, though, as some currency-positive catalysts may be approaching on the horizon. See more here: USD | Stronger for longer...but not stronger forever?

- **EUR weakness may reverse over time** as the long-standing theme of capital outflows from Europe into US fixed income may start to reverse, as the eurozone pivots from current account surplus to current account deficit and the spread between local yields and FX-hedged US yields widens further.
- **JPY may reverse course** amid speculation about a potential hawkish shift in BoJ policy. Governor Kuroda's term ends in March 2023, and investors may begin to price in a higher risk of a more hawkish replacement
- **Chinese growth expectations may turn** from lower to higher as continued policy stimulus and rising expectations that COVID-19 lockdowns may be a thing of the past buoy investor optimism.
- **US data may soften, weighing on Fed expectations** as policy tightening takes hold, giving investors comfort that 'peak hawkishness' may be behind us.

To be clear, these themes are not 'today' themes, and USD strength continues to make sense. But they could become 'tomorrow' themes, and we suggest **investors remain vigilant to what may come next**. **For a market that is bullish USD in positioning and thought, new catalysts on the horizon should be more important than usual.**

Weaker CNY Adds to EM FX Risks

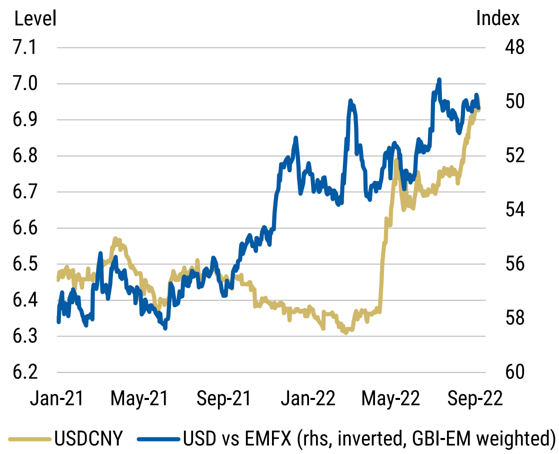
For much of the EM currency bear market of the past 18 months, EM currencies have not had to contend with sharp CNY depreciation very often. The first nine months of the EM currency weakness that started in June 2021 occurred during a period of CNY strength versus USD, for example.

The periods of CNY weakness that we have seen have tended to be relatively short-lived affairs, such as the weakness that occurred while Shanghai was locked down and the weakness seen in the past few weeks (Exhibit 7).

Given the significance of China as a trading partner for many economies (Exhibit 8), a depreciation of CNY would have a larger positive impact on the trade-weighted exchange rates of other economies than a similarly-sized depreciation of smaller trading partners. This then puts greater pressure on the USD cross to make a larger adjustment to maintain a given level of competitiveness.

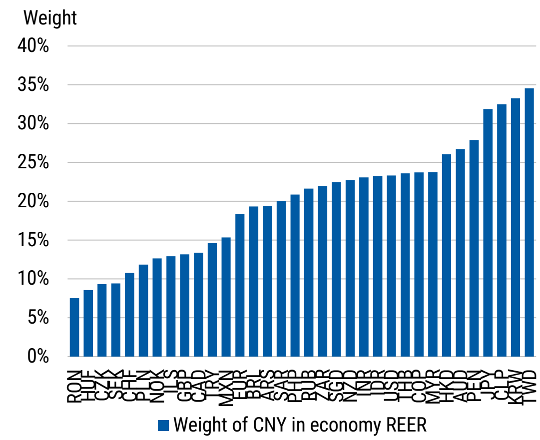
The weights shown in Exhibit 8 are taken from the BIS, whose methodology takes into account not only the weight of China in a given economy's bilateral trade but also the effect of competition between China and a given economy in third markets (see here). China is a large weight in the REERs of Taiwan, Korea, Chile, and Japan compared to most other economies.

Exhibit 7: CNY weakness adds to pressure on EM FX



Source: Morgan Stanley Research

Exhibit 8: Who is exposed to CNY weakness?



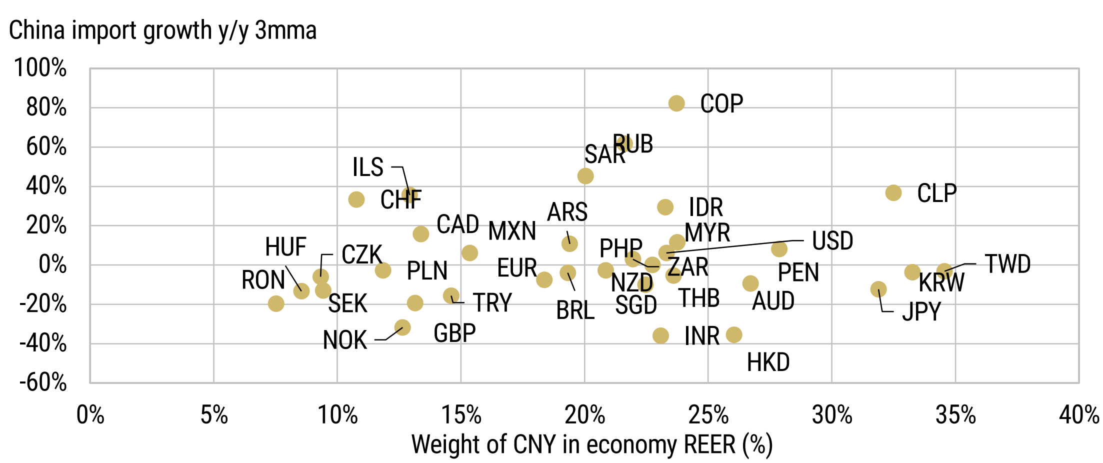
Source: BIS, Morgan Stanley Research

The movement of CNY itself is not the only China-related risk for EM. Of course, the weak growth momentum in China is a significant factor for EMs. The greater the trade links, the larger the exposure an economy has to the weak domestic demand picture in China.

In USD terms, import growth in China dropped from around 20% at the beginning of 2022 to 0-0.4% in March-April and came in at 2% in July. Economies that have not only borne the brunt of that import slowdown but also have China as a larger-than-average trading partner are likely to have seen greater pressure placed on their currencies.

Exhibit 9 shows China's import growth for July broken down by economy and shows why just focusing on the weight of CNY in the REER can be misleading. Chile has one of the highest CNY weights in its REER, but is also experiencing very strong demand for its produce from China, with the three-month moving average of China import growth from Chile standing at just under 40%Y.

Exhibit 9: China growth and CNY weakness pose dual risks



Source: BIS, Haver Analytics, Morgan Stanley Research

By contrast, Japan, Korea, and Taiwan – economies that have similar levels of exposure to CNY as Chile in their REERs – have all suffered from muted import growth from China.

Asia under pressure: So far this year, JPY, KRW, and TWD have been among the worst-performing currencies against USD. Amid this latest move higher in USD/CNY, USD versus a basket of JPY, KRW, and TWD has pushed convincingly to new highs while the Fed's Broad USD index is just inching up.

Other factors, such as the sensitivity to USD rates, are of course playing an important role in pushing USD versus Asia FX higher, but the sensitivity to China growth and CNY weakness is also likely playing a role.

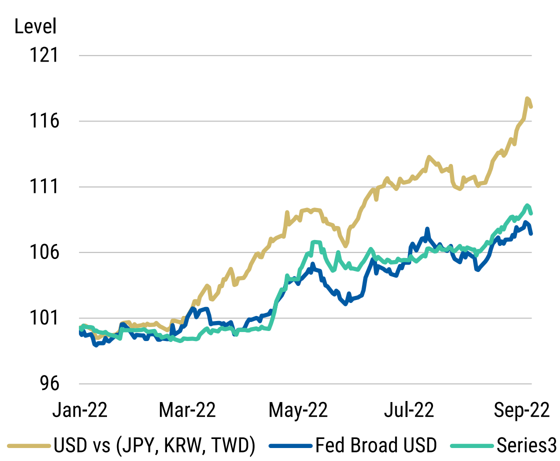
The weakness in JPY, KRW, and TWD has caused the idiosyncratic risk premia (IRP) to widen out to levels not seen since 2013. The IRP model is a two-factor model that uses the historical relationship between the relevant currencies and two global factors – USD and carry.

Deviations from the exchange rate level implied by the historical relationship are considered risk premia and negative values suggest that the currency is cheap. JPY, KRW, and TWD are considered cheap by this model.

What the model does not take into account though is terms of trade. This cycle has been unusual for Asian FX, as terms of trade have deteriorated, with energy prices in particular rising this year amid a global growth slowdown.

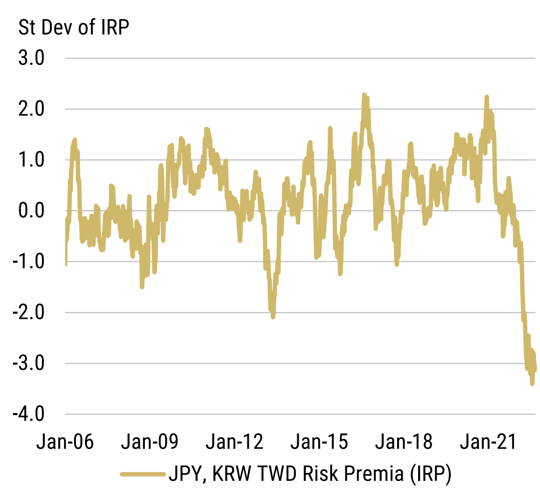
This has pushed FX valuations in Asia to weaker levels than would have been the case had terms of trade improved as they typically would have done in an economic downturn. This is something our risk premia model is not capturing, so we would not act on the signal being generated.

Exhibit 10: CNY weakness adding to JPY, KRW, and TWD pressure



Source: Bloomberg, Morgan Stanley Research

Exhibit 11: JPY, KRW, and TWD screen as cheap, but terms of trade needs to be factored in

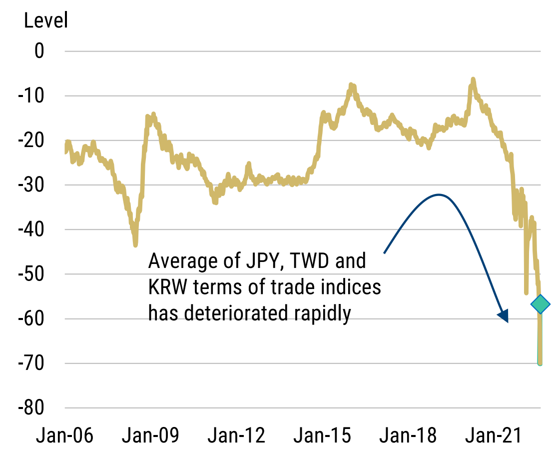


Source: Morgan Stanley Research

Stark terms: The terms of trade deterioration for JPY, TWD, and KRW are stark (Exhibit 12) and are consistent with the extreme move in the IRP for the same currencies shown in Exhibit 11. While European economies are suffering the direct consequences of reduced natural gas flows from Europe, Asia is also affected as the price of LNG is pushed higher in response.

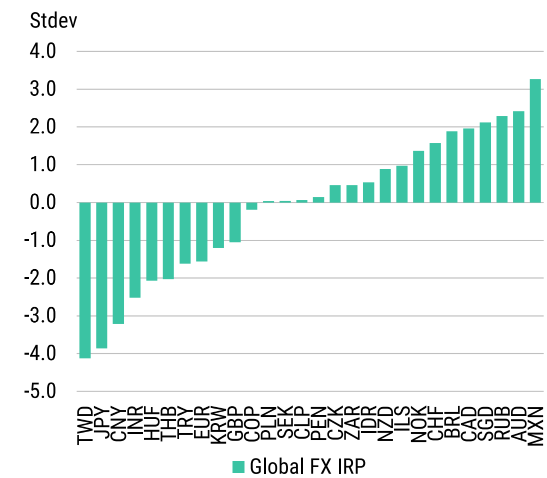
Given that terms of trade have been such a dominating factor for a large number of economies this year, it is not surprising that our IRP model is suggesting that Asian and European currencies are generally considered among the cheaper currencies, and commodity producers are among the more expensive.

Exhibit 12: Terms of trade deterioration has been stark for JPY, TWD and KRW



Source: Bloomberg, Morgan Stanley Research

Exhibit 13: Asia and Europe show high risk premia, but terms of trade explains it



Source: Morgan Stanley Research

Our Current Stance On Markets

In global rates markets, we maintain 1s10s flatteners and short the FFN3 contract. We maintain long July '24 TIPS BE vs. short July '23 TIPS BE, and 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 German 2s5s10s fly and our short UKT 1T57. We recommend paying EUR 2s5s10s swap fly. We maintain long RX Invoice spread. We maintain October 147/145/144 Bund broken put fly, and a 30s50s OAT steepener (long OAT May 50 vs May 72). We maintain short SPGB Jan 27 vs. FTFR Feb 27. We maintain our tactical EUR 10s30s swap steepener, our OATei24 BE, and 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, we open UKT 1H 53 vs Bund Aug 48 beta weighted, and UKT 0S 33 versus 4Q 32 and 4H 34. We continue to recommend rec Sep'22 SONIA MPC meeting, long 5y UK RPI swap, and long UKT 1E 39 vs. UKT 0H 61.

In Japan, we maintain long JB367 ASW. We maintain our TONA OIS 5s20s steepener, 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 long BAZ2 - BAZ3 Steepeners.

In foreign exchange markets, we exit long NOK/SEK. We enter short GBP/USD (target 1.100, stop 1.159) and long USD/CAD (target 1.350, stop 1.275). We maintain short EUR/USD (target 0.970, stop 1.05). In FX options, we exit long 3m USD/JPY seagulls (initially priced 25-Apr-22 0.69%).

Interest Rate Strategy

United States

As commodity prices have eased, consumer surveys and soft data in general (see Lower Gas Prices, Higher Consumer Confidence, Higher Yields), which tend to lead hard data surprises by 3 weeks, have been on the upswing. There remains plenty of room for hard data around labor markets and growth to continue to surprise to the upside in the coming weeks.

We think there is good reason to discount next week's CPI in advance for three reasons. First, the real surprise in data since the July FOMC has come from growth and labor market data, while the inflation narrative has progressed as expected. Second, the CPI fixings market and the Bloomberg consensus estimate for m/m inflation is neatly aligned, around -0.1%, lowering the chance of a surprise. Third, the analysis of the upcoming CPI print will likely be similar to July CPI; with headline and core optically slowing, while the underlying inflation remaining strong.

Powell's speech at the Jackson Hole conference borrowed lessons from history – but allows us to quantify how high the terminal rate might go. The Fed wants to avoid the easier policy seen under Arthur Burns to avoid the overly restrictive policy seen under Paul Volcker. The Fed wants to split the difference – one could call it the "half-Volcker" strategy. Under Burns, the Fed was barely restrictive, while policy was restrictive to the tune of about 250bp under Volcker. The middle ground (i.e., the half-Volcker strategy) lies somewhere around 125bp restrictive, which would take the terminal rate closer to 4.25%. We continue to stay short FFN3 (June FOMC contract) and continue to suggest 1s10s flatteners.

We look at four reasons behind the recent curve steepening, and think 3 of the 4 are unlikely to persist. We think (1) September seasonality, (2) repo specialness and short base on the front-end, (3) re-calibration to a higher neutral rate, and (4) term premium expansion in Europe drove the curve steepening. We see the first three factors fading away to allow the curve to flatten again, but the fourth factor remains a risk to our trade.

Finally, in a special section, we address concerns about the Fed's QT program not going to plan. Taking a detailed look, we find 1) the Fed's UST and MBS holdings have declined at the intended pace; 2) other factors, not QT, have driven the fast decline in reserves; and 3) the impact of QT on markets remains poorly understood.

Euro area

10y Bund yields have risen by 50bp since the latest Global Macro Strategist on August 20. With that rise in yields, 10y Bund yields are back close to our new September fair value, derived from our long-term model. However, we think that there is strong rationale for Bunds to trade on the cheap side following the upcoming discussions on ECB QT in October. This should imply a quicker rise to our 2% year-end target. With the fair value also rising above 2% next month and the ECB warning investors about further major depo hikes, we believe that the peak we forecast at 2.25% for Bund yields could be challenged before late October. We keep our bearish trades on duration (pay EUR 10y10y swap, long EUR 5y5y inflation, long Bund October 147/145/144 broken put fly).

On the curve, the decoupling between the belly of the German cash and swap curves led us to switch from the cash into the swap fly (pay EUR 5y swap). At the long end, the EUR 30y swap is rich vs cash, 10y and 50y swap according to our short-term and long-term models. We keep our EUR 2s5s10s swap fly (pay 5y) and EUR 10s30s swap steepeners.

On EGBs, the compression on core/semi-core ASW on the ECB announcement of a remuneration of governments' cash deposits has gone too far, with 10y and 30y German ASW trading too cheap versus our model. Likely renewed selling pressure on non-core EGBs on QT discussions, and more discount on BTPs ahead of the Italian elections, should also push the ASW fair value higher. We entered a long Bund ASW on September 5, and we keep our short 5y Spain, and 30y Italy versus OATs of the same maturity.

United Kingdom

Following a month of being bearish on UK duration, we finally turn bullish. With substantial fiscal news already priced in and a 50bp underperformance vs. Bunds, the bar is set high for further gilt underperformance. Therefore, we recommend buying 30y gilts vs. Bunds with 80% beta to diminish the inherent directional nature of the spread position.

On RV, we highlight the cheapness of UKT 0S 33 and recommend buying it versus the usual suspects of the gilt CTD futures, namely UKT 4Q 32 and UKT 4H 34. With QT happening at the end of the month, we expect more free float in the market of both bonds. Last but not least, we maintain our bullish 5y RPI swap position as we expect some normalisation of the front-end inflation weakness.

Japan

We continue to see a steeper yield curve beyond the 10y tenor. The combination of rising overseas interest rates, new 24-year highs in USD/JPY, and accelerating headline CPI inflation will likely continue to drive a fresh wave of positioning for BoJ policy adjustments.

That said, with the June BoJ meeting likely to have discouraged many overseas investors from positioning against Japan’s central bank, we think any speculation about possible BoJ tweaking would be positioned on the 10y+ side of the JGB curve (where the BoJ has less commitment to intervening) or the JGB futures and OIS market (where it is not able to intervene directly).

We suggest overweight positions in 10y JGB longs, now that the on-the-run issue is yielding close to 25bp, or more specifically switching from DV01-neutral weights to DV01 2 vs 1 for 10s20s JGB steepeners. We remain comfortable with 5s20s OIS steepeners, with the BoJ's normalization process appearing to have already been more-than-adequately priced into the short- to medium-term sector. We also maintain our long 10y JGB ASW trade.

United States | The half-Volcker trade

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	Duration	Curve	Inflation
VIEW	**NEUTRAL ON LONG END** **BEARISH ON SHORT END**	**FLATTENING BIAS**	**BULLISH SHORT TERM INFLATION** **HIGHER REAL YIELD BIAS**
Remarks	75bp hikes can be priced beyond September	High terminal rates, recession risks, and pension bid	Markets underestimate inflation persistence; cheap pricing
Trades	Short FFN3 contract	1s10s flatteners	Long 1y1y CPI swaps

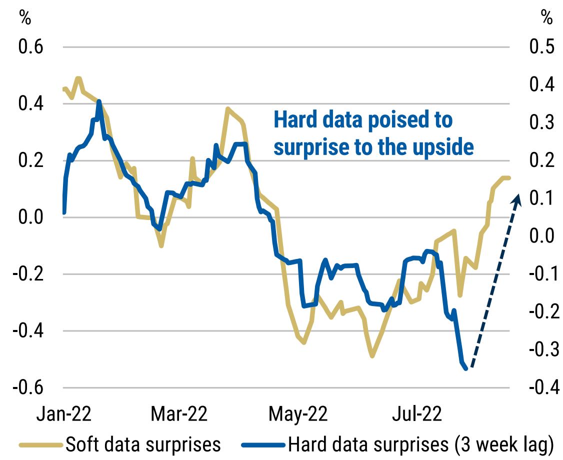
From (inflation) strength to (growth) strength

Three weeks ago, in our last weekly publication, we discussed (1) how growth and unemployment data have continued to look strong, and (2) how the Fedspeak and FOMC minutes were pointing to a hawkish reaction function. Since then, Fed Chair Powell made the hawkish reaction function more clear (see quote below) in his speech at Jackson Hole while, at the same time, other Fedspeak from Waller, Brainard, Bullard, Evans, and Kashkari, etc. continues to corroborate another 75bp hike in September and the strategy of getting to a high terminal rate and holding rates.

> ***Powell on asymmetry of reaction function:*** *While higher interest rates, slower growth, and softer labor market conditions will bring down inflation, they will also bring* ***some pain*** *to households and businesses. These are the unfortunate costs of reducing inflation. But a failure to restore price stability would mean* ***far greater pain.***

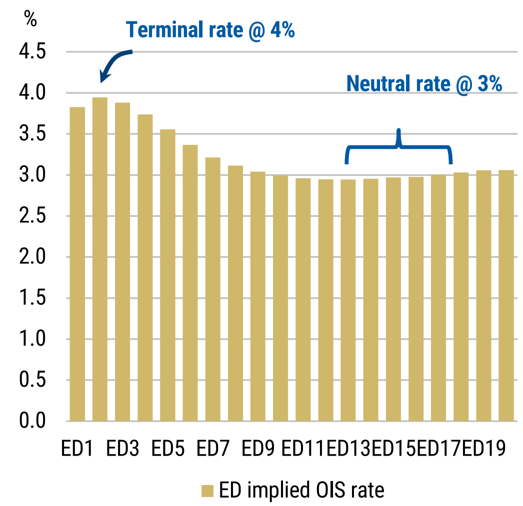
Growth and labor data continues to surprise to the upside as well, and overall data since the last FOMC meeting has come in strong – pointing to slowing but overall robust growth. As commodity prices have eased, consumer surveys and soft data in general (see Lower Gas Prices, Higher Consumer Confidence, Higher Yields), which tends to lead hard data surprises by 3 weeks (see Exhibit 14), has been on the upswing. There remains **plenty of room for hard data around labor markets and growth to continue to surprise to the upside in the coming weeks.**

Exhibit 14: Soft data vs. hard data surprises in the last six months



Source: Bloomberg, Morgan Stanley Research

Exhibit 15: Forward 3m rates implied by the market on September 9



Source: Bloomberg, Morgan Stanley Research

With growth data coming in strong, it warranted the market to look at the idea of a higher neutral rate. Powell had remarked at the July FOMC press conference that neutral may be around 2.25-2.5%, but the data since July strongly suggests a higher neutral rate, closer to 3%, something we believe was always likely (see The terminal rate is higher than you think). Market forwards strips now settle close to 3%, with terminal rates pretty close to 4% (see Exhibit 15).

Does next week's CPI even matter? The Fed is already looking past next month's CPI, and catching on to the sticky inflation problem. St. Louis Fed President James Bullard has already discounted next week's CPI print, saying that a "good" CPI print "shouldn't affect" the call for hikes in September, as he says he leans toward a 75bp hike.

We think there is good reason to discount next week's CPI in advance for three reasons. First, the real surprise in data since the July FOMC has come from growth and labor market data, while the inflation narrative has largely progressed as expected. Importantly, labor and growth data are leading indicators for inflation, and a strong labor market suggests the underlying inflation impulse remains strong.

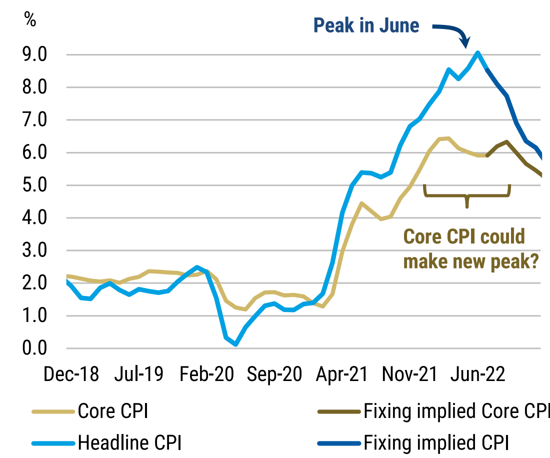
Second, the CPI fixings market (see Exhibit 16) and the Bloomberg consensus estimate for m/m inflation is neatly aligned, around -0.1%, not suggesting a strong bias from the fixing market.

And third, as the CPI fixing market suggests, as well as the trends in the CPI numbers so far, the analysis of the upcoming CPI print will likely be the same as July CPI; with headline and core optically slowing, while the underlying domestically generated and sticky parts of inflation – most visibly in rents – remain strong (see Exhibit 17).

In other words, the upcoming print is unlikely to deliver the "clear and convincing" progress on inflation sought by the Fed. That would mean the Fed could deliver the 75bp hike in September and continue to stay in inflation fighting mode.

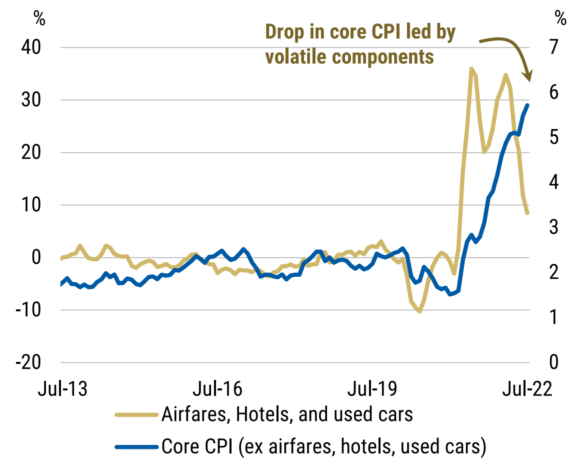
Overall, this backdrop where growth and labor markets have surprised to the upside (with more hard data surprises possibly in store), while inflation has progressed as expected, remains conducive to the market to keep pushing a higher terminal rate. How much higher? This is where Powell's speech from Jackson Hole offers some clues.

Exhibit 16: CPI fixings market on September 9



Source: Bloomberg, BGC, Morgan Stanley Research

Exhibit 17: Core CPI broken by volatile vs. sticky categories



Source: Bloomberg, Morgan Stanley Research

The half-Volcker strategy

Powell's speech at the Jackson Hole conference borrowed lessons from history. The main lesson was that Fed policy must get restrictive and control inflation, sooner rather than later. As Powell noted, the unemployment costs of bringing down inflation increase with delay, and the Fed's aim is to avoid that outcome by acting with resolve now.

In simple terms, the Fed wants to avoid the easier policy seen under Arthur Burns to avoid the overly restrictive policy seen under Paul Volcker. The Fed wants to split the difference – one could call it the "half-Volcker" strategy.

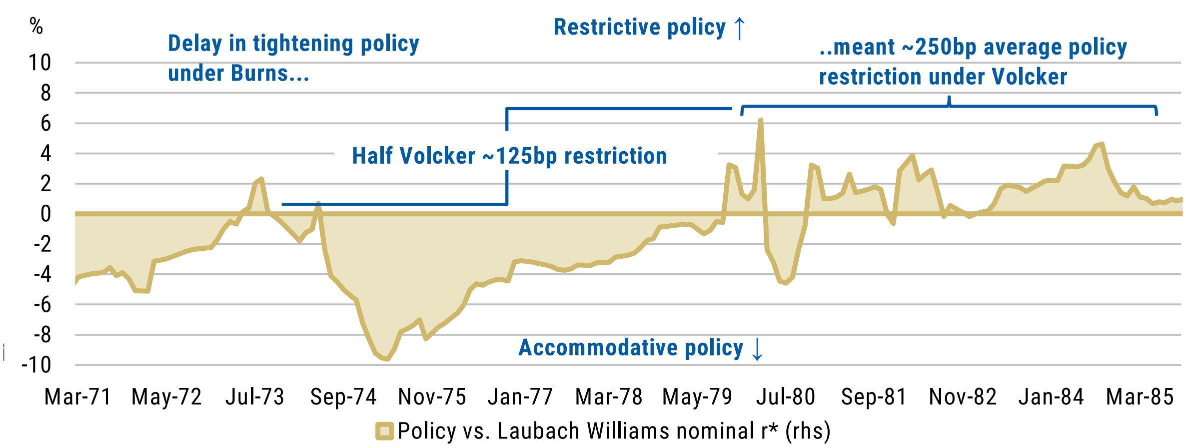
Powell's history lesson: *History shows that the employment costs of bringing down inflation are likely to increase with delay, as high inflation becomes more entrenched in wage and price setting. The successful Volcker disinflation in the early 1980s followed multiple failed attempts to lower inflation over the previous 15 years. A lengthy period of very restrictive monetary policy was ultimately needed to stem the high inflation and start the process of getting inflation down to the low and stable levels that were the norm until the spring of last year. Our aim is to avoid that outcome by acting with resolve now.*

How do we quantify the half-Volcker strategy? Under Burns in the 1970s, the Fed was barely restrictive, and in fact mostly accommodative (see Exhibit 18). One can say the restriction in the 1970s was essentially zero. On the other hand, with this delay in controlling inflation, policy was significantly restrictive under Volcker in the early 1980s – to the tune of about 250bp – and it persisted for many quarters in the early 1980s.

If the Fed is looking to avoid the delay of the 1970s (i.e., no restriction in a bid to avoid being overly restrictive by ~250bp), the middle ground (i.e., the half-Volcker strategy) lies somewhere around 125bp restrictive. If the market, which currently sees neutral close to 3% (see Exhibit 15), wants to price this half-Volcker strategy, it would take the terminal rate closer to 4.25%, about 30-35bp higher than the current terminal rate priced around ~3.90%. In addition, such a terminal rate will need to persist for much of 2023, if not beyond that.

With Powell's Jackson Hole speech spelling out lessons from history, and our framework quantifying it as the half-Volcker strategy, we continue to see scope for markets to price an even higher terminal rate – north of 4%. To play this theme, we continue to stay short FFN3 (June FOMC contract) and continue to suggest 1s10s flatteners.

Exhibit 18: Fed funds rate vs. Laubach Williams implied neutral rate, 1970-1985



Source: NY Fed, Laubach Williams paper, Morgan Stanley Research

Why did the yield curve steepen?

Since mid-August, our preferred curve flattener, 1s10s, has steepened on net by about 20bp. At its peak, earlier this week, it had steepened by nearly 35bp before flattening back. Why has the curve steepened, even though rates have continued to rise? And what does this mean for our curve-flattening trade? We identify four reasons why the curve had steepened and conclude that the steepening impulse should once again give way to more flattening.

1. **September seasonality:** We flagged in our publication three weeks ago that the first half of September tends to see the US curve steepen. However, we did not worry too much about this seasonal steepening as it tends to dissipates over time.

2. **Specialness in the front-end, and the subsequent richening of front-end paper:** We noted in our money markets section three weeks ago that specialness in the front-end has driven richening of the 1y and 2y points, steepening the curve. Such specialness is also unlikely to persist.

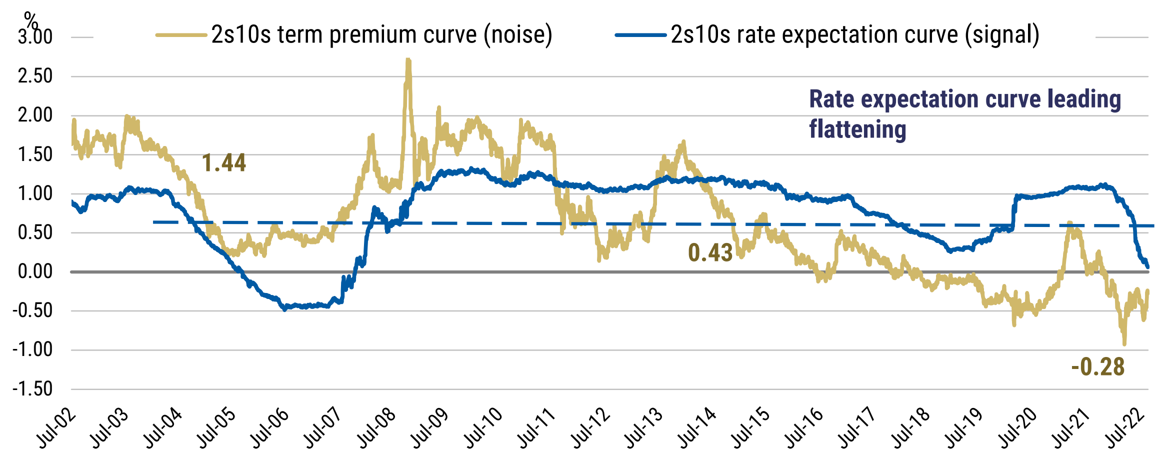
3. **Re-rating of the neutral rate:** As the market upgraded its assessment of the neutral rate based on solid data, the intermediate part of the curve has underperformed, allowing the curve to steepen. We think this re-rating is close to fully done, and

data would need to be a lot stronger to drive a further re-rating of short-term neutral.

4. **Tem premium boost from Europe:** As rates in the UK and Europe have moved higher based on strong inflation prints and hawkish central banks actions, it has lifted term premium curve in the US as well. This is the key risk to our call for further flattening – a continued rise in yields in Europe, and possibly QT from the ECB. We explored this dynamic in our recent publication.

Earlier in the year, we had highlighted a framework for why the yield curve is likely to invert deeper in the current cycle (see Living with yield curve inversion). Decomposing the 2s10s curve into term premium curves and rate expectation curves, we had noted that the 2s10s term premium curve was too low vs. comparable points in history, structurally shifting the 2s10s curve flatter (see Exhibit 19).

Exhibit 19: 2s10s term premium and rate expectation curves in the last 20 years



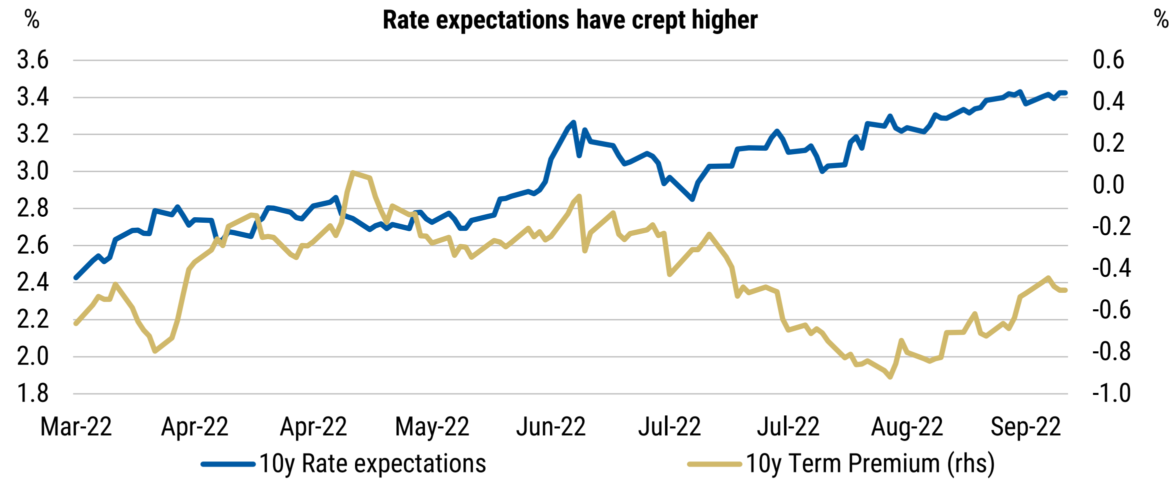
Source: Bloomberg, ACM model, Morgan Stanley Research

As it turns out, the 2s10s term premium curve has actually steepened on net in the last six months, while the rate expectations curve has flattened. In that sense, the flattening in the year so far has mostly come from the increasing expectation that the terminal rate will be well above neutral. Notably, the 2s10s rate expectation curve is still positive, suggesting that growth slowdown concerns are still not enough to drive the rate expectation curve into negative territory.

While we expect both rate expectation and the term premium curve to drive flattening from here, the main question is why the term premium curve has not flattened further. And the answer comes down, once again, to the term premium expansion from Europe. As Exhibit 20shows, the 2s10s term premium curve has a significant correlation with German Bund yields.

Whenever European yields have driven price action, the 2s10s term premium curve tends to steepen, offsetting any flattening in the rate expectation curve. And thus European rate policy remains an important risk to continued curve flattening.

Exhibit 20: 2s10s term premium curve and 10y Bund yield



Source: Bloomberg, Morgan Stanley Research

Trade idea: Maintain short FFN3 at 99.06

Trade idea: Maintain 1s10s flatteners at -35bp

United States | Myth-Busting the Fed's QT

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We address concerns about the Fed's QT program not going to plan. Taking a detailed look, we find 1) the Fed's UST and MBS holdings have declined at the intended pace; 2) other factors, not QT, have driven the fast decline in reserves; and 3) the impact of QT on markets remains poorly understood.

Slower start to QT? Not really

- After three months of QT, total SOMA holdings have only declined by $68bn (as of 8/31) since June versus the announced $47.5bn/month pace. We look at UST and MBS separately to show that the headline numbers obscure the true progress of QT.
- For **UST,** we find that the pace of decline is going as intended after adjusting for TIPS inflation compensation.
- For **MBS,** we find that market settlement conventions and the Fed's reinvestment schedule result in QT working with a lag of 4-6 weeks.

Faster decline in reserves? Other factors, not QT, to blame

- The $611bn decline (as of 8/31) in bank reserves year to date might suggest that QT is already having a 'faster' impact.
- We examine the Fed's balance sheet to note that the decline has been driven mainly by other Fed liabilities instead of QT.

What does QT mean for markets?

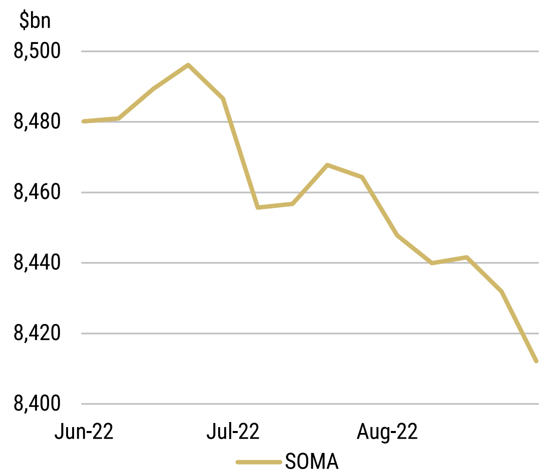
- We show that the impact of QT on markets is hard to understand because: 1) different institutions take the lead in determining the initial impact; 2) there are first-round and second-round impacts; 3) QE and QT affect different markets in different ways; and 4) markets price these effects with different probabilities at different times.
- However, first-round effects on UST and MBS are already priced into markets (i.e., MBS pricing no QT asset sales).

QT: How Is it Going?

The current hiking cycle has been unprecedented in pace and magnitude (225bp in four FOMC meetings) as the Federal Reserve tries to bring down the highest inflation in decades. This means that balance sheet dynamics have probably not been "top of mind" for investors in the past couple of months as the immediate effects of a smaller balance sheet are harder to quantify.

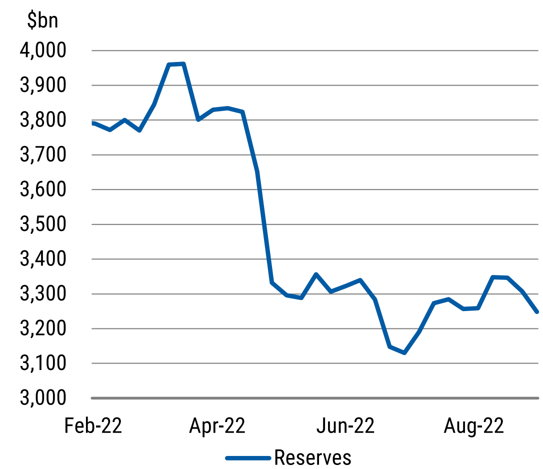
On June 1, the Fed officially started its plan to reduce its $8.4trn balance sheet at a cap of $47.5bn per month. Last week (9/1), the monthly cap increased to $95bn ($60bn in UST and $35bn in MBS). However, some investors might wonder if QT is going as expected, given that total SOMA holdings have only declined by $68bn (as of 8/31) since June versus the announced $47.5bn/month pace (Exhibit 21).

Exhibit 21: SOMA has only declined by $68bn since June



Source: Federal Reserve, Morgan Stanley Research

Exhibit 22: Bank reserves have declined at a faster pace relative to SOMA YTD



Source: Federal Reserve, Morgan Stanley Research

This might create the notion that QT has been 'slower' than intended (myth #1). At the same time, the $611bn decline (as of 8/31) in bank reserves year to date (Exhibit 22) might suggest that QT is already having a 'faster' impact (myth #2). In this update, we will address these concerns by looking at the:

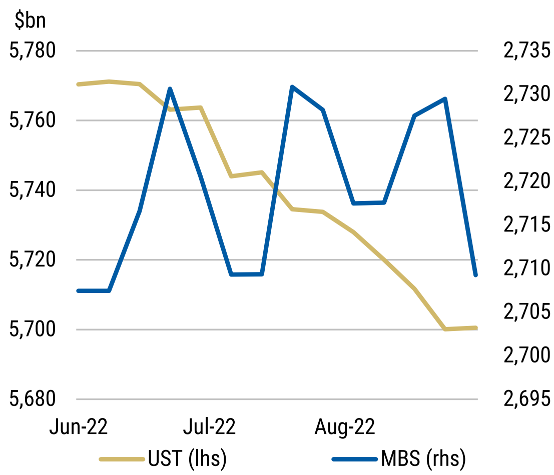
- Fed's UST and MBS holdings to find that QT is unfolding at its intended pace;
- Bank reserves year to date to note that decline has been driven mainly by other Fed liabilities instead of QT;
- Impact that QT has on markets.

SOMA: Why So Slow?

As of August 31, total SOMA holdings declined by $68bn since June 1, with UST lower by $70bn and MBS actually higher by $2bn (Exhibit 23). After three months of QT, these numbers suggest a slower pace than the $47.5bn/month ($30bn UST and $17.5bn MBS) implied by the current cap. We look at UST and MBS separately to show that there is nothing to worry about.

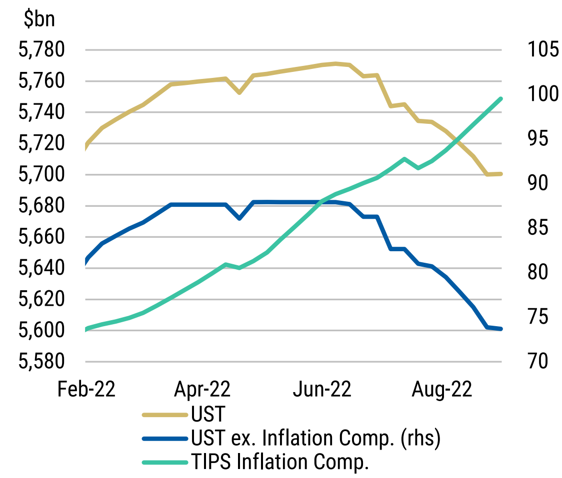
For UST, we find that the pace of decline is going as intended ($30bn/month since June) after we exclude the inflation compensation received on TIPS. For MBS, we find that market settlement conventions and the Fed's reinvestment schedule result in QT working with a lag (more below).

Exhibit 23: SOMA holdings broken out by UST and MBS



Source: Federal Reserve, Morgan Stanley Research

Exhibit 24: TIPS inflation compensation for SOMA holdings of UST



Source: Federal Reserve, Morgan Stanley Research

US Treasuries

There are two main points to consider when looking at UST holdings to assess the pace of QT. The first is that TIPS receive inflation compensation in the form of increased principal. As shown in Exhibit 24, SOMA UST holdings have seen an increase of $27bn in TIPS inflation compensation this year (Federal Reserve Statistical Release H.4.1). To properly measure the pace of QT for US Treasuries, we need to exclude this from our calculations.

The second is the need to capture all maturities as the bulk naturally occur on the last day of the month. Given that the Fed releases weekly data, it is important to take data points that capture month-end.

For example, in Exhibit 25, holdings as of 6/29 (the 'month-end' release) show that UST only declined by $7bn in June. However, once we incorporate the TIPS inflation adjustment and use 7/6 to capture month-end, we can see that total UST holdings declined by the expected $30bn.

The $81bn decline as of 8/31 shows that QT is going as intended. The 'missing' $9bn, versus the expected $90bn as implied by three months of $30bn caps, is likely attributed to second point just discussed of capturing month-end maturities.

Exhibit 25: UST SOMA holdings since the start of QT

SOMA UST Holdings ($bn)	1-Jun	29-Jun	6-Jul	31-Aug
Treasury Bills	326	326	326	326
Coupons (Notes, Bonds, FRNs)	4,975	4,964	4,942	4,900
TIPS	381	383	384	375
Total UST ex. Inflation Comp.	**5,682**	**5,673**	**5,652**	**5,601**
TIPS Inflation Comp.	88	91	92	100
Total UST	**5,770**	**5,764**	**5,744**	**5,701**

Change since QT start ($bn)	29-Jun	6-Jul	31-Aug
Total UST ex. Inflation Comp.	**(9)**	**(30)**	**(81)**
TIPS Inflation Comp.	3	4	12
Total UST	**(7)**	**(26)**	**(70)**

Source: Federal Reserve, Morgan Stanley Research

MBS

While the Fed's MBS portfolio may not have shrunk as much as some investors may have expected thus far through QT (as shown in Exhibit 26), this is to be expected given the way the Fed purchases mortgages on a forward settle basis and how it accounts for paydowns.

The Fed began running off its MBS portfolio starting in June, with an initial run-off cap of $17.5bn/month for three months, which is set to increase September to $35bn/month. However, the $17.5bn/month reduction actually happens with a lag due to mismatches in the settlements of purchases and run-off, as we show below.

Let's walk through an example. The Fed actually started running off its mortgage portfolio in the middle of June because its purchase schedules are mid-month to mid-month since they are based on paydowns that it finds out on the fourth business day (BD) of the month. The paydowns it got on June 4BD were $30.5bn, and so it announced $30.5bn paydowns - $17.5bn cap = $13bn of gross buying from mid-June to mid-July.

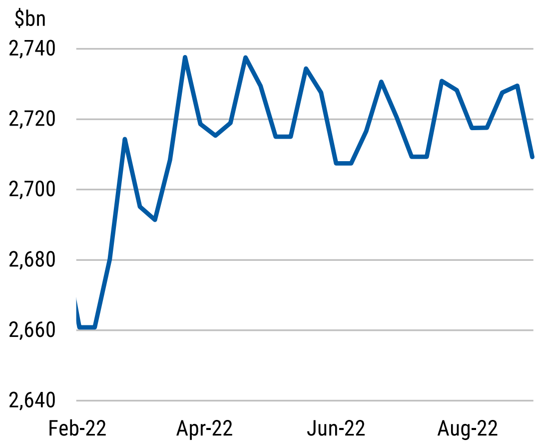
When the Fed is buying mortgages, it is buying forward settle TBA. Typically, when the Fed buys TBA, the settlement is the next month, but note that the settlements are different for different types of mortgages; conventional mortgages settle around the second week of the month, 15yr mortgages typically a few days after conventionals, and Ginnies settle around the third week of every month.

Hence, the lag is due to: 1) the purchase schedule being announced mid-month with purchases carried out over a one-month period and 2) Fed purchases being in forward settle TBA.

The first full month that the Fed had balance sheet run-off was in July, but settlements that month were mostly from bonds purchased in June, which were based on schedules set in both mid-May (does not include QT) and mid-June (includes QT). August is actually the first month that will show a full month of QT on a settled basis.

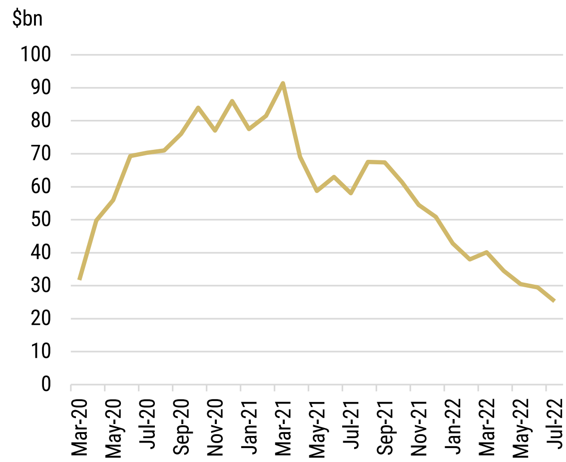
However, to see the impact of the reduction in the Fed's holdings, you need to see the change in the factors. While the Fed knows the new factors on 4BD, it does not post them until the 25th of the month as that is when it receives the cash from the paydowns. Thus, the reduction does not really show up until we see the Fed's weekly balance sheet reporting that includes the 25th. This roughly 1.5-month delay from the reinvestment and settlement process should be accounted for when examining the effects of QT on MBS holdings.

Exhibit 26: SOMA holdings of MBS



Source: Federal Reserve, Morgan Stanley Research

Exhibit 27: Historical Fed paydowns



Source: Federal Reserve, Morgan Stanley Research

QT effectiveness on MBS holdings also will be slower due to declining paydowns once the initial cap sets to the larger $35bn cap. High mortgage rates have decreased refi incentives and thereby decreased prepay speeds, leading to lower Fed paydowns. In turn, the Fed's MBS holdings decline by a smaller amount each month starting in September, creating a slower QT process.

We show historical Fed paydowns in Exhibit 27 and show that they have declined steadily as we have entered a higher rate regime and moved away from a refi environment. Once we ramp up to the full $35bn cap in the cycle starting mid-September, Fed paydowns should come in below the cap and the Fed should have no reinvestment needs.

The mortgage market understands that paydowns are expected to consistently undershoot the Fed's run-off cap, which has led to discussions as to whether the Fed might actively sell MBS to reach the cap. We discuss our thoughts around potential MBS sales here, and ultimately believe that the Fed will not conduct asset sales.

Introducing sales to reach the run-off cap will only marginally speed up the Fed's balance shrinkage at the risk of introducing a completely unprecedented tool to the MBS market, and we believe the risks to the latter ultimately will outweigh the benefits to the former from the Fed's perspective, especially given the slowdown we have already seen in housing activity.

Reserves: Why the Fast Decline?

The clues to this year's decline in bank reserves can be found in the Fed's balance sheet. As a liability, bank reserves decline in two scenarios: 1) when assets decrease and/or 2) other liabilities increase. Hence, by looking at the Fed's major balance sheet items, we can illustrate the drivers behind the change in reserves.

In the first scenario, when SOMA holdings (the bulk of the Fed's assets) decrease, reserves also decrease assuming all other liabilities (see below) stay the same. For example, as the Fed reduces its UST holdings by not reinvesting maturities up to the outlined caps, the US Treasury will increase issuance to investors and drain reserves.

Second, when the Fed's other liabilities increase, reserves have to decrease as a consequence assuming no changes to assets. The Fed's major liabilities include currency in circulation (~$2.3trn), the ON RRP (~$2.2trn), and the US Treasury General Account or TGA (~$600bn). They can each separately impact the level of reserves.

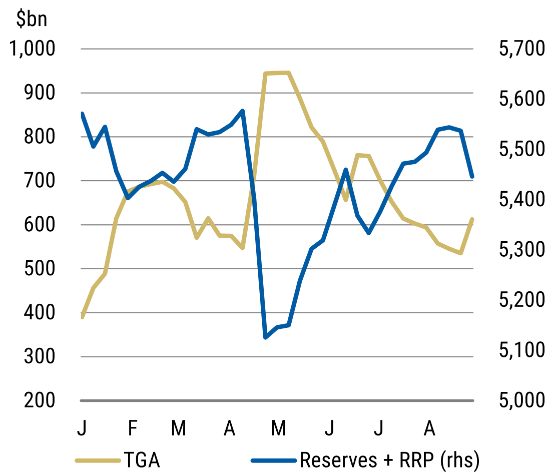
- When individuals withdraw cash (increase in currency in circulation), it leaves the banking system and reserves fall;
- Greater participation in the Fed's ON RRP facility by money market funds (MMFs), GSEs, or banks leads to fewer reserves;
- Increases in the cash held by the US Treasury at the Fed (TGA) is also cash put out of circulation, leading to fewer reserves in the system.

Given that SOMA has just recently started declining, we will focus on the liabilities. Currency in circulation tends to be stable over time and is unlikely to drive major swings in bank reserves (+2% year to date). On the other hand, the TGA and the ON RRP facility have increased by 57% and 28%, respectively, year to date.

The TGA serves as the US Treasury's 'checking account' at the Fed. As discussed, an increase in the TGA translates into a decrease in bank reserves or RRP. An example is individuals and corporations withdrawing funds from their checking account (reserves) or MMFs (ON RRP) to pay taxes.

In Exhibit 28, we can observe this inverse relationship between the TGA and reserves + RRP. This year, the resolution of the debt ceiling in January and record tax collections in April led the TGA to increase past $900bn. Since then, the TGA has declined as the US Treasury manages its cash balance around its $650bn target, leading to an increase in reserves + RRP as this cash makes its way back into the system.

Exhibit 28: As liabilities, the TGA and reserves + RRP have an inverse relationship



Source: Federal Reserve, Morgan Stanley Research

Exhibit 29: QT has had very little impact on bank reserves so far

Impact on Reserves by Component (in $bn)

	May YTD	QT	YTD
SOMA	208	(68)	140
RRP	(286)	(200)	(486)
TGA	(400)	177	(223)
Other	(60)	18	(42)
Reserves	**(538)**	**(73)**	**(611)**

Source: Federal Reserve, Morgan Stanley Research

As we have discussed before (see here), the ON RRP facility has seen increased usage as investors navigate the current hiking cycle. As of July-end, MMFs made up over 90% of the RRP and have allocated over $2.6trn to repo, an $881bn increase year on year. Over this same period, AUM for these funds has only increased by $108bn.

On top of the behavior from money market investors driving higher RRP balances, banks have also seen slower deposit growth (see here). This is a consequence of higher rates driving depositors to look around for better yields. For example, a corporate client moving deposits to a MMF is reflected by a decrease in reserves and increase in the ON RRP.

In Exhibit 29, we summarize the change in reserves by balance sheet item. The main takeaway is that QT has had little impact so far (-$68bn). Instead, we find that the US Treasury's cash-management activities, decisions of money market investors, and banks' willingness to shed non-operational deposits are behind this year's decline in reserves.

What Does QT Mean for Markets?

QT sounds intimidating, especially when respected investors mention the term and, at the same time, ring the fire alarm on financial news networks. Earlier this year, we discussed our view that passive QT was *mostly* priced in to the asset classes most directly affected by it: US Treasuries and agency MBS.

Unfortunately, the exact workings of QT and QE, and their ultimate impact on broader markets, aren't well understood. And that's not just a comment about the general public's understanding. It even applies to investors who have long dealt with quantitative policies and for academics who have long studied them.

There are four reasons why the impact of quantitative monetary policies, as the Fed has implemented them, is hard to understand.

First, different institutions take the lead in determining the impact of QE versus QT. The Fed determines the first-round impact of quantitative easing, while the US Treasury and mortgage originators determine the first-round impact of quantitative tightening.

Second, as the term 'first-round impact' implies, there are second-round impacts as well. In the case of quantitative easing, the first round occurs when the Fed buys a US Treasury or agency mortgage-backed security, known as an agency MBS, from an investor. The second round occurs when that investor uses the cash from the Fed to buy something else, or not.

In the case of quantitative tightening, the first round occurs when an investor sells something in order to raise the cash it needs to buy a forthcoming Treasury security or agency MBS. The second round occurs when the Treasury auctions that security, or when a mortgage originator issues an agency MBS, in order to raise the cash that the Fed no longer provides.

Third, QE and QT affect different markets in different ways. QE affects the Treasury and agency MBS markets directly in the first round. But, in the second round, investor decisions about how to invest that cash could affect a wide variety of markets, from esoteric loan products to blue-chip equities.

In that sense, the impact of QE is also indirect and could affect some markets more than others. Similarly, with QT, investor decisions about what to sell could affect a large number of markets, and some more than others. In addition, what the US Treasury issues and what mortgage originators sell can change over time with financing needs and different market environments.

Fourth, and finally, markets price these different effects – first and second rounds, direct and indirect – with different probabilities and at different times. For example, when the Fed announces a QE program, we know with near certainty that the Fed will buy Treasuries and agency MBS, and generally know how much of each the Fed will buy. So, investors can price in those effects relatively soon after the announcement, and before the buying has begun.

But we don’t know with nearly the same probability what the sellers of those Treasuries and agency MBS will do with the cash until they actually get the cash from the Fed. And that could be months after the announcement, when the Fed actually buys the securities.

Figuring out the effect on markets from QT is even more complicated, because even though we know what the Fed will no longer buy, we don’t know exactly what or how much the Treasury or mortgage originators will sell.

If all of this sounds complex, then you understand the point. There are no easy conclusions to draw for your investment strategies when it comes to QT, except when it comes to first-round effects on assets it directly affects: US Treasuries and agency MBS. And, in our view, these markets have already priced in the effect of passive QT, i.e., no asset sales.

Euro area | 2% should occur earlier

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Exhibit 30: Summary of EUR views

1-month horizon	Duration	Curve	Inflation	ASW	EGB spreads
Macro	Bearish	Flatter	Higher	Tighter	Wider
Net supply after QE	Negative	Steepeners 2s10s			
Valuation	Bund 17bp below Sep FV	EUR 5s10s30s swap 7bp cheap		Bund ASW 5bp above	2y BTP 18bp cheap vs Bono
Seasonality	Bearish seasonal until 19 Sep - 80%	EUR 2s10s steepening until 16 Sep - 87%		Bund ASW widening from 19 Sep	
Technical analysis	Weekly stochastics now oversold				
Market positioning	CTAs slightly long	2s5s/2s10s flatteners	Long 2y to 5y maturities	Short ASW	Short OATs
Preferred trades	Structural short	**Pay EUR 2s5s10s swap fly**	Long EUR 5y5y inflation	**Long Bund ASW**	Short 50y OAT vs 30y
	October 147/145/144 broken put fly	**Closed German 2s5s10s cash**			Short 5y Spain vs France
	Pay EUR 10y10y swap	Paid EUR 10s30s swap			Short 30y BTP vs OAT
		Long June 23 FRA/€STR basis			
Our view	**Bearish**	**Cheaper EUR 5y swap**	**Higher**	**Wider**	**Wider non-core spreads**

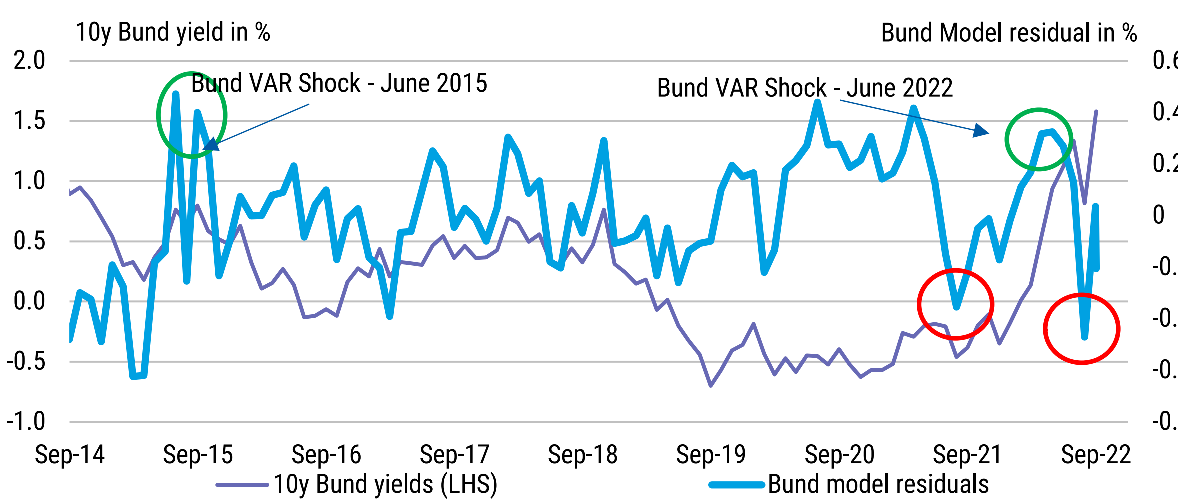
Source: Morgan Stanley Research

Duration

Since our latest Global Macro Strategist, Down the Jackson Hole We Go, Euro Area: Bye Bye 1%, Hello 2%, 10y Bund yields have risen 40bp. We mentioned at that time that a return to 1.50% was our first target, followed by 2% in 4Q22. Following the change in our economists' forecasts regarding the path of the ECB depo and inflation, we adjusted our Bund yields forecasts under the base, bull, and bear scenarios (see European Rates: Revisiting Our Bund Forecast and Trades Ahead of the ECB). What about the upcoming weeks?

– Regarding the base scenario, we still expect a peak in Bund yields in early 4Q22 – perhaps the second half of October post the bearish duration seasonality above 2%, perhaps at 2.25%, before a stabilization to 2%, i.e., 140 on the December Bund future. The new path of our Bund model fair value rises at a faster pace to 2% in October (october fair value is above 2.00% vs. 1.75+% as initially expected), making current levels still rich despite the 85bp sell-off since mid-August (see Exhibit 31).

Exhibit 31: 10y Bund yield vs. our model fair value: less rich than early August, but still below fair value

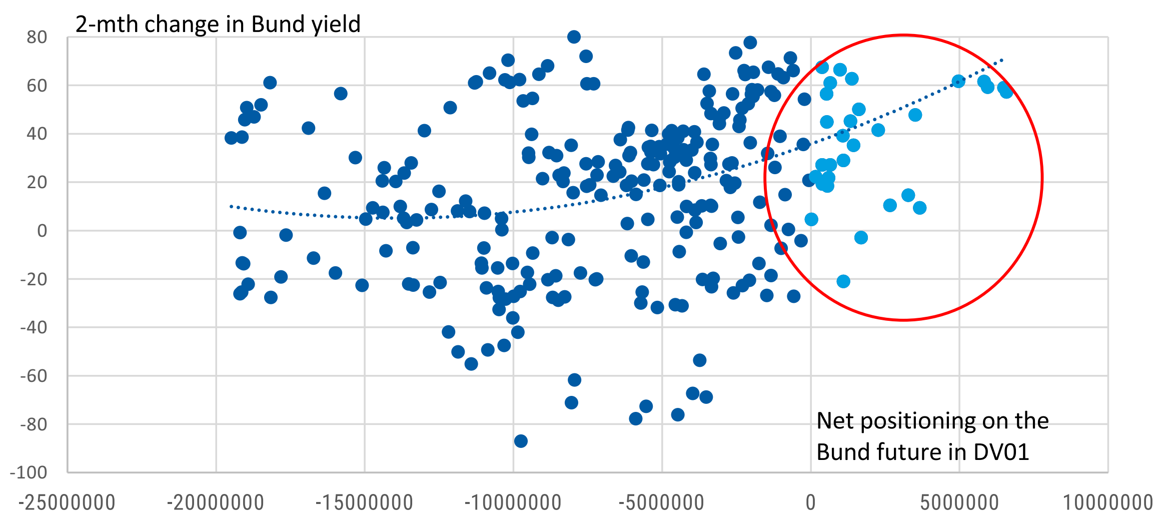


Source: Morgan Stanley Research

– On the positioning side, while the net positioning of final investors (real money, CTA, and hedge funds) went from net long EUR +0.4m DV01 to EUR -2.5m DV01 on 2 September, the story is quite different in the 10y bucket, with a net long of EUR 1m DV01. That number has to be compared to the net short positioning of EUR 12.2m DV01 in June or EUR 19.5m DV01 in February (see Exhibit 32). Focusing on periods of net long positioning of Bund futures, we observed that the following two-month change in the 10y Bund yield was asymmetric with a net positioning above 0, which implied a higher probability of a rise in yields.

With net positioning still above 0, we continue to believe the risk of a short squeeze is very limited while Bunds remain exposed to negative news. Finally, we believe real money investors adding back duration through long cash positions explains the relative stabilization around 1.55% on the 10y Bund over the past week. It makes the scenario of an unwinding of long positions on any negative news (as the one observed the first half of June) more likely.

Exhibit 32: Final investors' net positioning of Bund future: a net long tends to be consistent with higher yields two months later



Source: Eurex, Morgan Stanley Research

– Regarding the ECB, President Lagarde made it clear that the board was committing to push inflation back toward 2%, with the tightening likely to last until February 2023 and "jumbo" hikes still possible. We think the press conference overall was a strong argument in favour of our short duration view over the coming weeks. The prospect of the likely discussion of the QT at the non-monetary policy meeting on 5 October could also add additional pressures all along the core curve.

– Finally, while we acknowledge that technical indicators like weekly stochastics have reached oversold territories, the seasonality remains bearish for Bunds and USTs until 19 September (see Exhibit 33). Investors should bear in mind that all of the Bund seasonal pattern occurred over the previous year (both bullish and bearish) with the exception of the one in August, where we highlighted in July that the probability was much lower when Bunds were in a bear market, hence we did not expect the August event (bullish) to occur.

Accordingly, combining the outputs of the valuation, positioning, seasonality, and the

ECB's press conference, we think that our 2% target in October – with a potential peak at 2.25% – is not an aggressive call.

Exhibit 33: 10y Bund still in its bearish duration seasonal pattern

Bund 10y: Seasonal rally patterns								
Period	Length	Average move	Av. Rally	Obs. Prob	Max	Min	St.dev.	Av. move/St. Dev.
February from d8	13	-9.4	-12.2	87%	11.5	-25.1	9.9	1.0
June from d8	26	-13.2	-17.2	87%	24.9	-30.7	13.9	1.0
August	14	-9.6	-17.3	73%	22.2	-42.8	17.7	0.5
November from d9	11	-4.3	-10.9	80%	42.0	-42.1	18.4	0.2
Bund 10y: Seasonal sell-off patterns								
Period	**Length**	**Average move**	**Av. Sell-off**	**Obs. Prob**	**Max**	**Min**	**St.dev.**	**Av. move/St. Dev.**
June	6	6.1	12.3	67%	39.0	-15.5	12.8	0.5
September	**13**	**6.9**	**14.0**	**80%**	**33.0**	**-42.1**	**18.1**	**0.4**
October	**12**	**5.4**	**10.5**	**73%**	**18.7**	**-11.5**	**9.9**	**0.5**

Source: Morgan Stanley Research

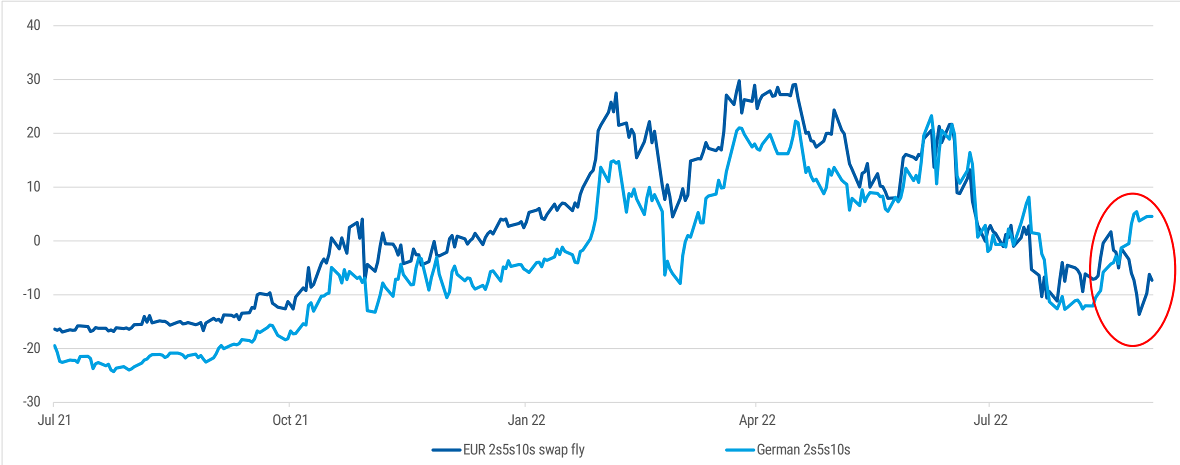
Trade idea: we keep our EUR 10y10y swap (paying).
Trade idea: we maintain our October 147/145/144 Bund broken put fly.

Curve

The usual bear steepening of the EUR (and USD) curves observed 87% of the time in the first half of September has been observed so far on both curves, with a more pronounced move on the German cash curve than the swaps. However, as Exhibit 34 illustrates, there has been an as unusual decoupling between the belly of the German curve and the EUR swap curve over the past three weeks. In the Global Macro Strategist, Down the Jackson Hole We Go, Euro Area: Bye Bye 1%, Hello 2%, we underscored the higher dislocation of the belly of the German curve and switched from the EUR swap fly into the German one.

After the significant cheapening of the German fly and given the renewed expensiveness of the EUR 5y swap – 7 to 9bp too rich, according to our model – we preferring switching back to the EUR swap fly, and entered the trade on Monday (see European Rates: Revisiting Our Bund Forecast and Trades Ahead of the ECB). All other things being equal, a full normalization would imply a return of the swap fly to 0. However, the likely repricing of red Euribor contracts, which are more than 30 cents above June lows, should push the fair value higher, perhaps in the +3/5bp area, in our view. The fly paying position also benefits from a 2.7bp carry and roll profit per month.

Exhibit 34: Diverging EUR 2s5s10s and German 2s5s10s flies



Source: Morgan Stanley Research

Trade idea: we closed our long German 2s5s10s fly on 5 September.

Trade idea: we entered a paying EUR 2s5s10s swap fly position targeting +3/5bp.

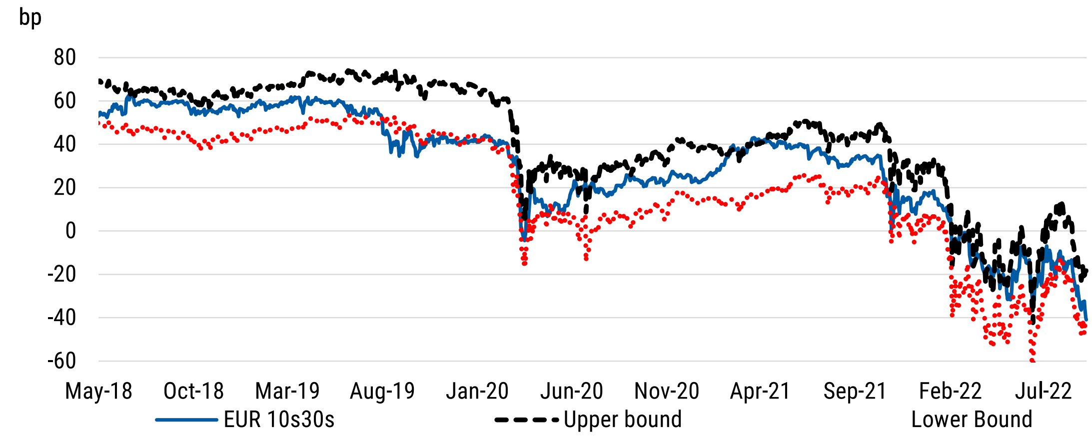
As far as the EUR 10s30s segment is concerned, in contrast to our expectations, the start of September and the prospect of renewed issuance did not fuel the usual bear steepening observed 80% of the time from 2007 to 2021.

Looking at the period from 15 August until now, our short-term model fair value on the EUR 10s30s swap fell from -10bp to -28bp, while the observed level moved from -13bp to -42bp, i.e., 14bp too flat. The spike in swaption and the equity volatility series and, to a much lower extent, the steepening of the money market curve are behind that renewed inversion as our short-term model fair value edged lower.

We would be inclined to expect the right-hand side volatility corner has limited upside from here unless calling for a significant drop in equity. The reassuring factor also is that the EUR 1s2s slope has already peaked and barely steepened recently, which could mean the fair value of our short-term model has limited downside from here. As Exhibit 35 below shows, the theoretical corridor of our EUR 10s30s swap model has actually stabilised for a few months after a September 2021/June 2022 period of a falling trend.

The bottoming process could be longer than expected but, with the peak in equity volatility and the EUR 1s2s swap slope already posted in 1H22, the risk of a renewed major decline in the theoretical corridor could be limited.

Exhibit 35: EUR 10s30s swap short-term model: the theoretical corridor* has been sideways for months

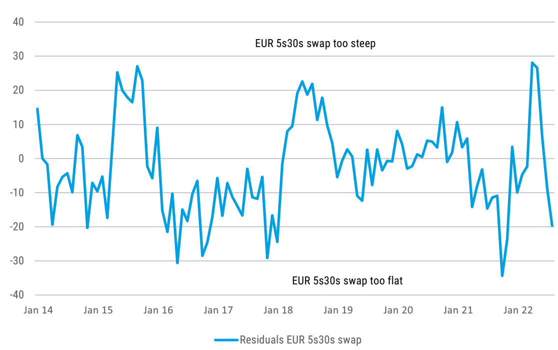


Source: Morgan Stanley Research Estimates, * fitted value +/- 1.5 standard deviations

Moving to our long-term model on the Bund and EUR 5s30s swap slopes – that model on a monthly frequency includes macroeconomic series like the ZEW expectations, University of Michigan economic sentiment, real short-term rates, or even excess liquidity and inflation expectations. Exhibit 36 and Exhibit 37 plot the residuals of our long-term model on EUR 5s30s swap and Bund slopes. Both are trading excessively flat vs. our model fair value – by 15 to 20bp.

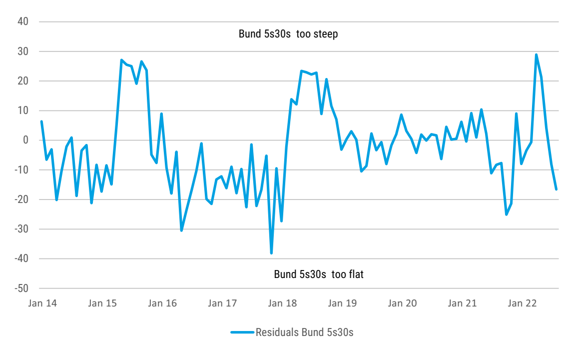
Such a dislocation is not back to October 2021 mispricing levels, but around 1.5 standard deviations away from our model fair value starts to be significant. Accordingly, given the input of our short-term and long-term models on the curve, and following the sharp decline in swaption volatility post ECB meeting, we prefer keeping our curve steepeners for the time being.

Exhibit 36: EUR 5s30s swap LT Model residual



Source: Morgan Stanley Research Estimates

Exhibit 37: Bund 5s30s LT model residual



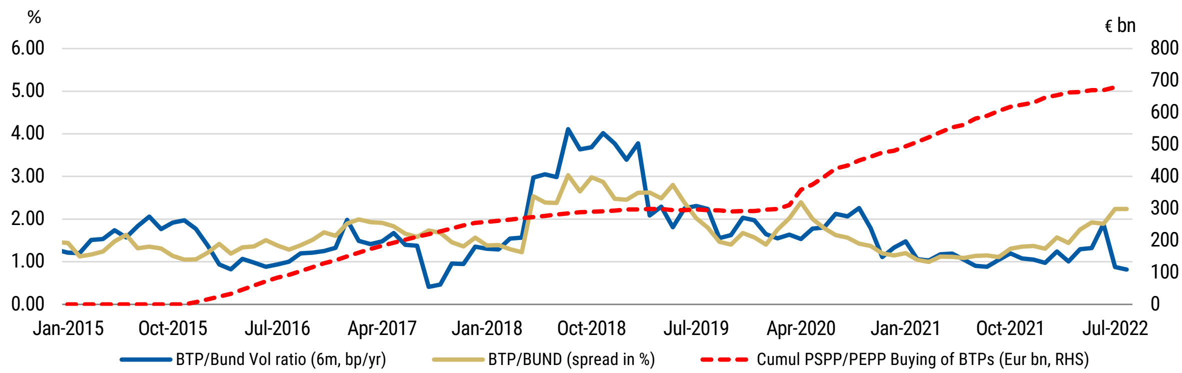
Source: Morgan Stanley Research Estimates

Trade idea: we keep our EUR 10s30s swap paying position for the time being.

Non-core: A Complicated Fall

Lately, we have been advocating that since the release of the transmission protection instrument (TPI) at June's ECB meeting non-core spreads have been trading in a range (see Rates Strategy: From a Widening To A Range). In part, this has been driven by increased vol in core relative to peripheral duration, in our view (see Exhibit 38).

Exhibit 38: BTP/Bund vol ratio and BTP-Bund spread (in %) vs. BTPs cumulative holdings (PSPP + PEPP)



Source: Bloomberg, ECB, Haver Analytics, Morgan Stanley Research

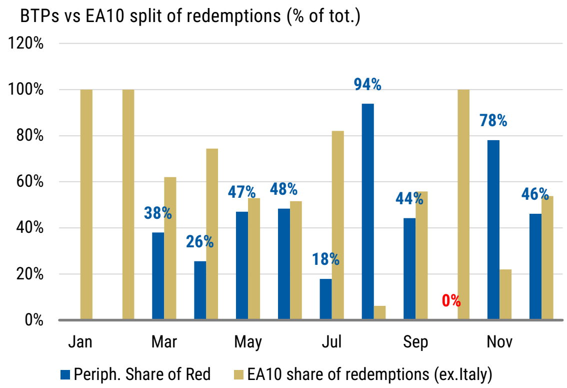
For most of this year, periphery just traded in line with its beta vs. core markets (i.e., it trended higher with global duration). We tend to think that the shrinkage in free-floating debt, given the ECB's holdings of Italian debt (at roughly one-third of Italy's total marketable debt) created a natural cap on BTP vol over time.

The BTP/Bund spread has remained fairly resilient, considering that besides the monetary policy normalization process happening in Europe and globally, we have another potential headwind to contend with, as Italy approaches general elections on September 25. Nevertheless, at least looking at the recent price action, the market has been unperturbed by the political uncertainty.

With the prospect of potential expansionary fiscal policy, which we think could increase the primary deficit by 2%, the 10-year BTP/Bund spread could be pushed temporarily above the upper end of the current range, perhaps to ~ 260-270bp, before stabilizing lower. **At the current juncture, significant selling pressure would be justified, in our opinion, in the event of any guidance towards an ECB PSPP roll-off from 2023.**

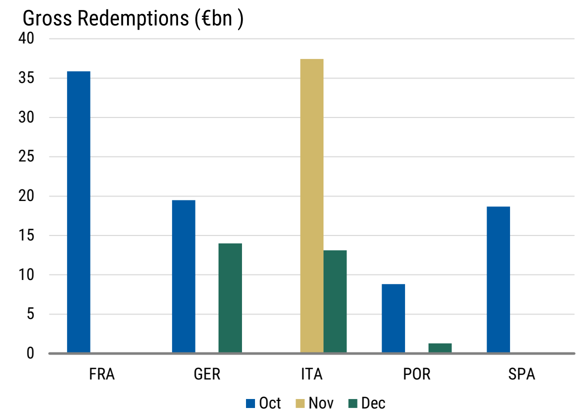
For now, we think that the "threat" of the TPI, along with the unpredictable re-allocation of PEPP's redemptions from core/semi-core into periphery (for more see Non-Core EGBs: Unleashing PEPP's Reinvestments Firepower) is preventing sizeable short BTP trades.

Exhibit 39: Italy vs EA10 share of redemptions (as % of total 2022 redemptions by month)



Source: Bloomberg, Morgan Stanley Research estimates

Exhibit 40: Gross redemptions (€ bn) in the biggest five countries



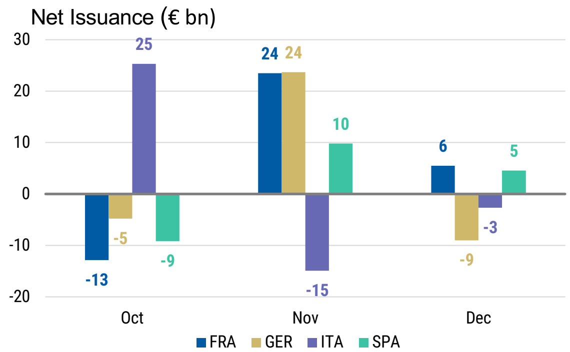
Source: Bloomberg, Morgan Stanley Research estimates

However, given the wild-card effect that Italian politics may have on BTP dynamics, we wanted to highlight as well that **the month of October (i.e., following the general elections in Italy) won't have any principal redemptions.**

The implication is that, excluding any potential inflows from core/semi-core PEPP's reinvestments, Italy won't have a source of support from its own principal reinvestments. As such, in the event of any excessive widening, support should come again from donor countries, assuming no TPI activation.

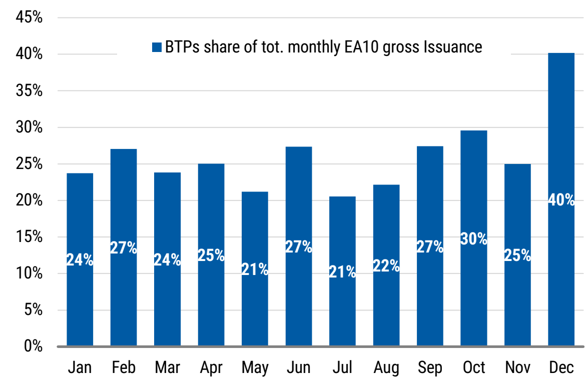
Putting this into perspective, when Bund holdings decreased by €14bn due to the reallocation into peripheral debt, Italy could still count on €13.4bn worth of redemptions in June-July 2022. This will be the first month where BTPs redemptions will make no contribution to the total % EA10 monthly redemptions since June, and where the only source of bond buying will take place via PEPP reinvestments (see Exhibit 39). Germany and France will be the only core/semi core countries with expiring principal, worth €19.5bn and €35.6bn respectively (see Exhibit 40). This could be a further source of sell off in core duration, on the margin.

Exhibit 41: 'Big four' countries, Oct-Dec net issuance



Source: Morgan Stanley Research estimates

Exhibit 42: BTP share of tot. monthly EA10 gross Issuance



Source: Morgan Stanley Research estimates

At the same time, this means as well that all the DV01 inflow in October will be net, and it should be worth ~€25bn (see Exhibit 41).

From a valuation perspective, besides the front end of the BTP curve, the market is not putting any discount on Italian debt (see Exhibit 43). What we have observed over the past three months is that the relative valuation of the 2-year BTP versus Bonos in our BTP/Bono model was a good contrarian indicator for the 10-year BTP/Bund spread. Indeed, when the 2-year BTP trades with almost no discount versus Bonos, it signals an imminent bottom for the 10-year BTP/Bund spread while, on the flip side, once it trades 40-45bp cheap versus the model (mid-June, late July), the 10-year BTP/Bund spread tends to find a cap.

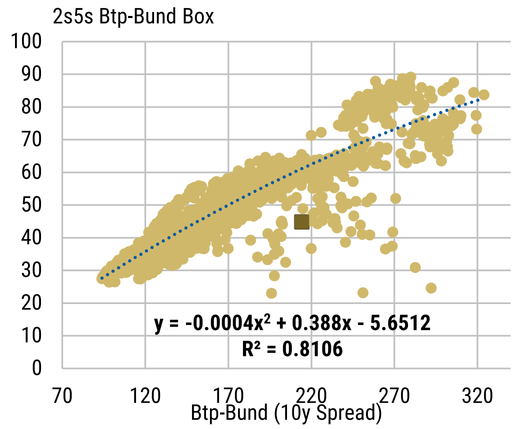
Exhibit 43: BTP spread fair value estimates

	2y Btp/Bono	5y Btp/Bono	10y Btp/Bono	15y Btp/Bono	30y Btp/Bono
Observed (bp)	84.3	103.3	113.5	100.9	68.8
Fair Value (bp)	57.1	95.4	104.0	93.6	68.2
Gap to Fair Value (bp)	**27.2**	**7.9**	**9.6**	**7.3**	**0.6**
Z score (Gap to Fair Value)	**2.54**	**0.66**	**0.91**	**0.88**	**0.06**
Std Dev (bp)	10.7	11.9	10.5	8.3	9.8
R2	77%	84%	85%	90%	86%

Source: Morgan Stanley Research estimates

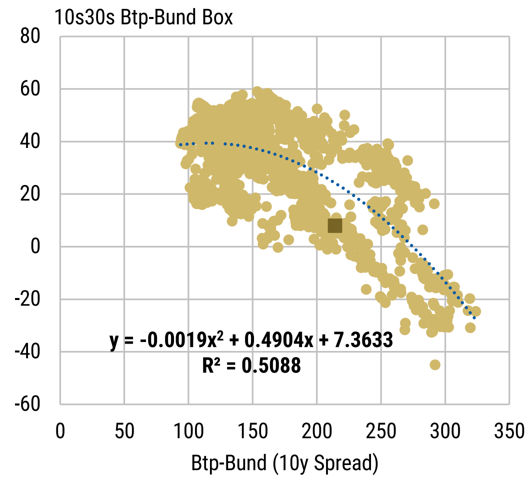
The weakness at the front end of the curve led every curve segment containing the 2y tenor to excessive flattening when comparing the curve box vs Bunds, relative to the level of the BTP/Bund spread (see Exhibit 44 andExhibit 45). We think this trend could continue as the 10y spread remains exposed to further widening.

Exhibit 44: 2s5s BTP/Bund box vs 10y BTP/Bund



Source: Bloomberg, Morgan Stanley Research estimates

Exhibit 45: 10s30s BTP/Bund box vs 10y BTP/Bund



Source: Bloomberg, Morgan Stanley Research estimates

At the same time the resilience of the 30y point continues to drive 10s30s flatter vs Bunds; despite the EUR 6bn green BTP 2035 syndication witnessed this week, the long end failed to re-steepen substantially. As such, given the discount at the short end, we maintain our BTP/OAT 30y widener (opened here) but we lower our target to 160bp from 195bp.

Trade idea: Maintain Short 30y BTP vs OAT targeting 160bp

United Kingdom | Bullish: buy 30y gilts vs. Bunds, buy UKT 0S 33 on RV

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Exhibit 46: Summary of GBP views

1-month horizon	Duration	Curve	ASW	Inflation
Macro	Bullish	Flatter		Bullish
Net supply	Neutral	Neutral		
Valuation		GBP 2s5s10s swap fly 5bp rich		
Seasonality	Bearish seasonal until 21 Sep - 80%	GBP 2s10s steepening until 19 Sep - 79%		
Technical analysis	Weekly stochastics now oversold			
Market positioning	CTAs short again			
Preferred trades	Buy 80% UKT 1H 53 vs DBR1.25 8/48			Long 5y UK RPI swap
	Buy UKT 0S 33 vs UKT4Q 32 and UKT 4H 34			
	Close short UKT 1T 57	Rec Sep 22 MPC meeting		
Our view	**Bullish**	**Flatter curve**	**Neutral on spreads**	

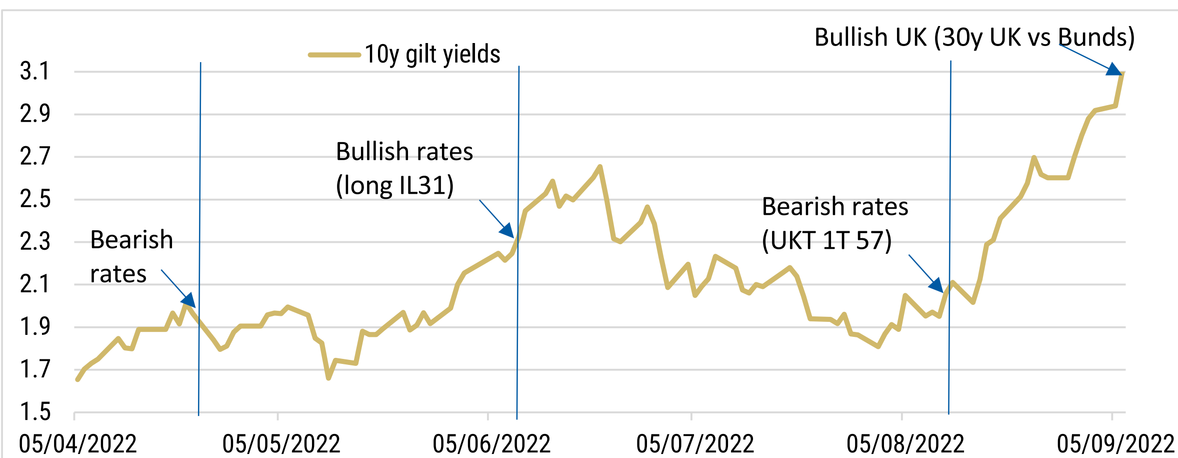
Source: Morgan Stanley Research

Content from the following section has previously been published here.

Duration view – time to go long: So far, 2022 has been a year of several tactical stories and we expect it to continue this way. So instead of one major theme, there are multiple themes that can lead to 30-50bp yield moves within a matter of weeks, and these are the moves we aim to capture.

Exhibit 47 shows the evolution of duration (10y gilt yield) over recent months and our key UK rates views. More recently (August 12) we went short duration through a short position in UKT 1T 57 (see here and here). With the market having moved the UKT 1T 57 yield to 3.37%, we no longer like this view, and close the trade. We now recommend buying UKT 1H 53 vs Bunds, beta weighted, and in this report we explain why.

Exhibit 47: Evolution of gilt duration since April 5, 2022, and key UK rates views



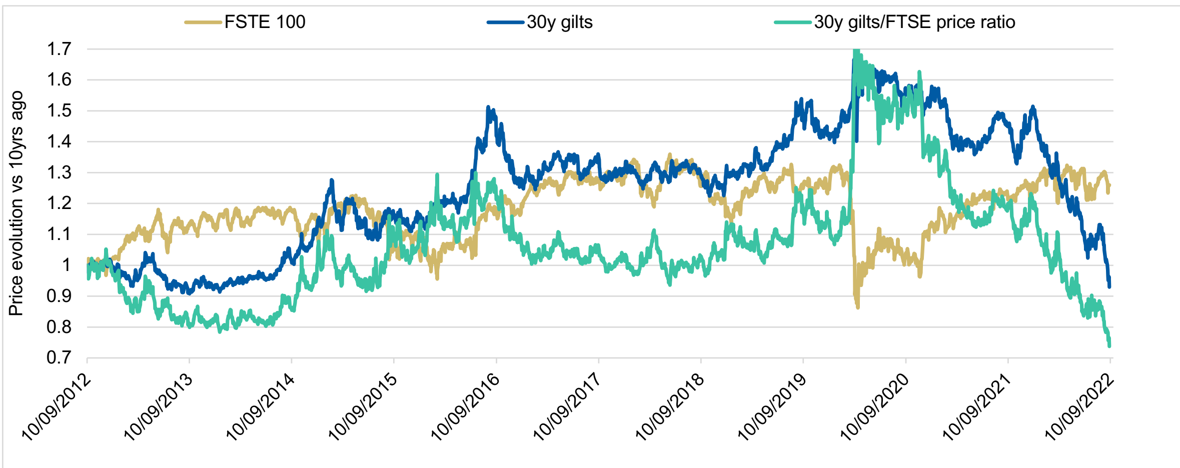
Source: Morgan Stanley Research, Bloomberg

How much UK-specific fiscal stimulus is in the price? We estimate that **at least £50bn** of additional gilt issuance has been priced by the market between July 21 and September 7. This is on the back of relative moves between gilts and Bunds, assuming that the only differentiating factor has been the change in the political landscape. To be clear, this is just for gilts, and **we suspect that for the DMO to deliver £50bn more in gilts for FY2022-23, financing needs will have to increase by £75bn, with the additional £25bn**

coming from T.Bills. This split between T.Bills and gilts is in line with previous reactions of the DMO to sudden changes in financing needs (for example the October 2021 decision). Overall, expectations of fiscal issuance are already high.

Fixed income versus equities: The continuous decrease in liabilities keeps shifting funding levels of defined benefit pension schemes to ever better levels. And FI has become attractive versus equities, based on the 30y gilts/equity ratio displayed in Exhibit 48. Volatility and the need to meet margin calls has kept some investors on the sidelines. We believe that the upcoming syndication can help generate demand, in line with market behaviour that we have observed in the past.

Exhibit 48: Cheap 30y gilts versus FTSE in relative terms



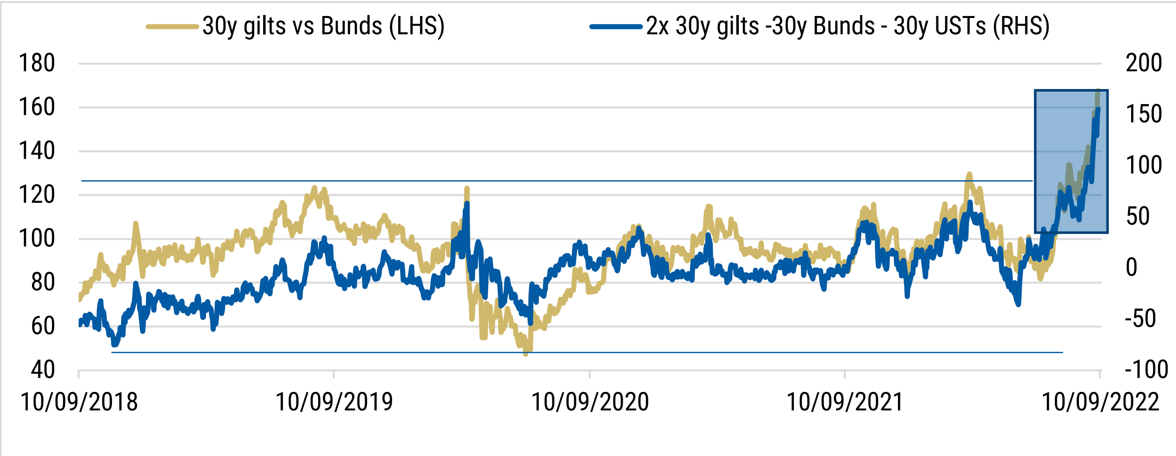
Source: Morgan Stanley Research, Bloomberg

Buy UKT 1H 53 vs. 30y Bunds 80% beta-weighted: There has been a clear cross market underperformance of gilts vs both Bunds and USTs. This underperformance is particularly prevalent at the long end of the curve and is shown in Exhibit 49. There are few points that we want to make:

- 30y gilt valuations have moved outside a historically tight range.
- There is not much difference between the two time series, indicating that most of the variability is coming from gilts and Bunds, with USTs playing a minor role in this particular spread.
- What happens to the UK may not be just a UK-idiosyncratic story. The need to support consumers because of high energy costs is also applicable to the euro area.

In terms of the short leg in EUR duration: we expect a 30y issuance from the Netherlands on 27 September, along with a 30y syndication from Germany on 18 October – these are estimates based on the two nations' announced issuance plans. So, we expect long-dated EUR duration to be offered in the days following the UK syndication, and in our view this additional EUR supply should be priced as soon as possible. In terms of choice of bond, we opt for DBR 1.25 8/48 which is the BUXL CTD. The reason for our choice is the ability to implement the trade idea at reasonable size. The risk to the gilt-Bund trade is continuous fiscal slippage in the UK that could lead to a prolonged period of weakness across gilt duration. For latest views on EUR duration see here.

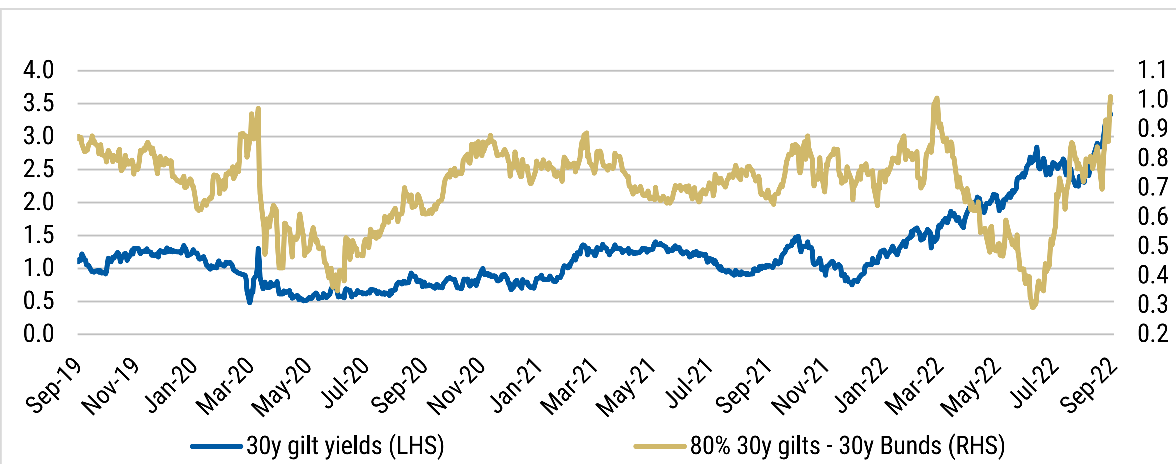
Exhibit 49: Long-dated gilts moving outside the range



Source: Morgan Stanley Research

Gilt Bund beta at 80%: Variability across long gilts is higher than for Bunds, so there is a need to beta-weight any position. Otherwise, investors playing for tighter cross-market spreads are implicitly playing for a market rally. A preferable, market neutral approach is to **buy 80k gilts for every 100k 30y Bund risk sold**. In the yield spread that we track, we multiply the UKT 1H 53 rate by 0.8 to reflect this beta. The inherent problem with every beta is that it cannot remain stable. So we had to average a rolling beta over different periods and decide on the number that we wanted to use.

Exhibit 50: 80% 30y gilt – 30y Bunds is fairly uncorrelated to directional moves



Source: Morgan Stanley Research

Summary of our trade rationale: 1) Substantial issuance discount baked into long gilt valuations; 2) Current cheap UKT 1H 53 on relative value vs neighbouring bonds, with the 30y sector also being cheap; 3) Supply tends to lead to demand in the UK; 4) Very modest greenium reflected in the bond.

Trade Idea: Maintain Buy 80% UKT 1H 53 vs DBR1.25 8/48 entry 105bp, target 50bp, stop 130bp
Trade Idea: Closed short UKT 1T 57 here

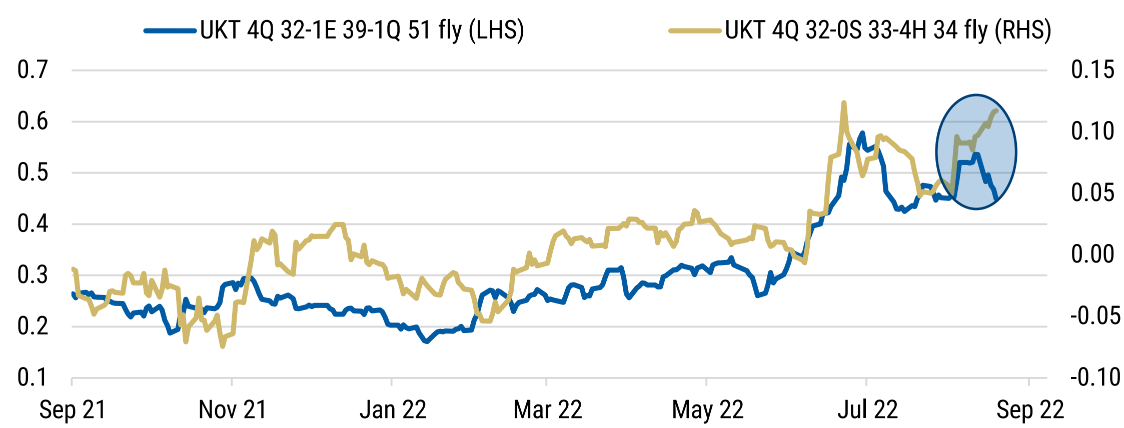
Green 10y RV: Buy UKT 0S 33 vs. UKT 4Q 32 and UKT 4H 34 on a 50:50 fly

In the current environment, we distinguish between "normalisation" and "market liquidation" trades. The former perform when volatility and inflation expectations fall with the market bracing for smoother market conditions. These are usually carry-positive trades and perform at times of better liquidity.

We had recommended one such trade earlier in the year (10s20s30s fly) which we initiated here and closed here. From a level point of view, the UKT 4Q 32 - 0S 33 - 4H 34 is at an attractive level. There is only £0.8bn of the green 0S 33 held by the APF. Once QT kicks in, we should expect sales of both UKT 4Q 32 and UKT 4H 34. APF holds £21.1bn and £22.9bn nominal of these bonds, respectively, and we suspect some of that amount will come back to the market. Both of these bonds are expensive now as both are candidates for the gilt CTD, so there is a special status. But we think that, from a valuation point of view, the green 10y is cheap enough, back to the extreme cheap levels of June (see Exhibit 51).

Some cheapness in green gilts is justified by their illiquidity vs. other conventionals due to the smaller amount outstanding. But with modestly more issuance, we expect this issuance discount to dissipate. The next 10y green auction is scheduled for 9 November. The risk to the trade is a continuation of high market volatility, which could keep the green gilt cheap.

Exhibit 51: Buying UKT 0S 33 vs. surrounding gilts is an attractive way to play for normalisation



Source: Morgan Stanley Research

Trade idea: Enter buy UKT 0S 33 versus 4Q 32 and 4H 34: Entry 11.5bp, target 0bp, stop-loss 16bp

Morgan Stanley may be appointed as a member of the syndicate assisting the United Kingdom Debt Management Office ("DMO") in relation to the forthcoming gilt issuance. If appointed as a syndicate member, the DMO will pay fees to Morgan Stanley and other syndicate members for their services. Morgan Stanley may also be appointed as a bookrunner for the forthcoming issuance. Please refer to the disclosures at the end of the report.

Japan | We see further steepening pressure

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How will overseas investors behave ahead of the October MPM?

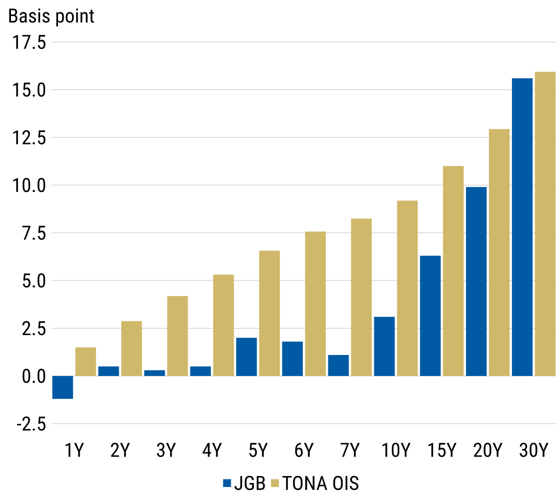
The JGB yield curve has been facing renewed bear-steepening pressure, as overseas interest rates have shifted back into an uptrend in the wake of the August 25–27 Jackson Hole Economic Symposium. The combination of rising overseas interest rates, new 24-year highs in USD/JPY, and accelerating headline CPI inflation appears to have catalyzed a fresh wave of positioning for BoJ policy adjustments, with bear-steepening particularly pronounced for the 10y+ portion of the JGB yield curve since Jackson Hole, whereas it has encompassed the entire OIS curve (see Exhibit 52).

With the June BoJ meeting likely to have discouraged many overseas investors from positioning against Japan's central bank, our impression is that more recent JGB-based positioning has focused primarily on the super-long sector (which is less "protected" by the YCC framework) and futures.

Positioning for a widening of the current 0%±25bp target range for the 10y JGB yield can however be executed in a more "direct" fashion in the OIS market, which effectively lies beyond the BoJ's immediate control.

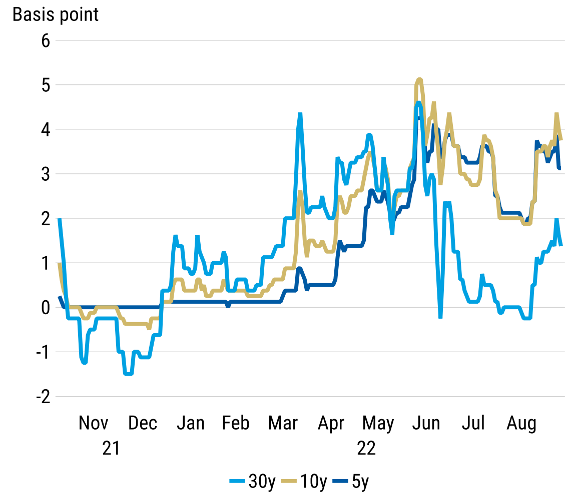
The belly zone of the JSCC-LCH basis curve has widened particularly sharply and, indeed, to a similar degree as was seen back in June (see Exhibit 53). Taking the above into consideration, we expect that the BoJ-supported <10y JGB sector will continue to outperform the <10y OIS sector for at least the time being, and suggest sticking with 10y JGB ASW longs in anticipation of 10y JGBs facing only limited downside with yields already so close to the +0.25% "ceiling".

Exhibit 52: Yield changes post Jackson Hole (JGB and OIS curve)



Source: Morgan Stanley Research, Bloomberg

Exhibit 53: JSCC-LCH basis by tenors

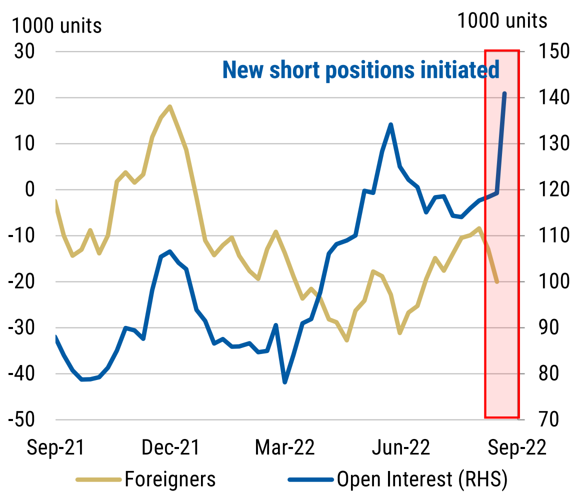


Source: Morgan Stanley Research, Bloomberg

Might futures be set to "decouple" from cash JGBs once again?

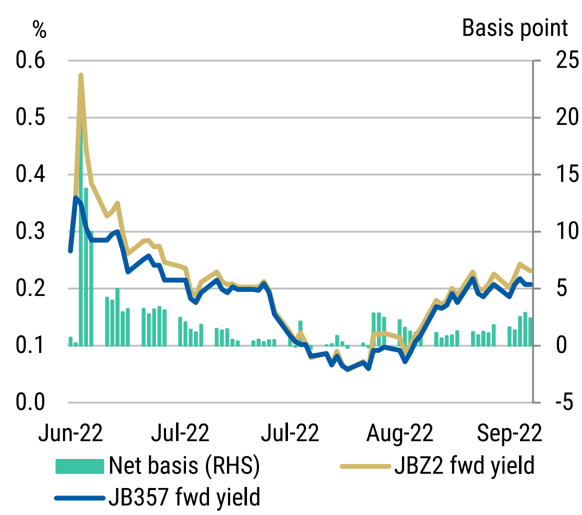
The futures sector is perhaps the sole part of the <10y JGB curve that might be at some degree of risk. CTAs and other momentum players appear to have been using futures to build new short positions (see Exhibit 54), with recent cheapening of JBZ2 to its cheapest-to-deliver issue (CTD) suggesting that it has been the primary tool for new short-making (see Exhibit 55).

Exhibit 54: Cumulative purchase of JGB futures by overseas investors (over the past year) and open interest



Source: Morgan Stanley Research, Bloomberg, Japan Exchange Group

Exhibit 55: JBZ2 forward yield vs JB357 yield



Source: Morgan Stanley Research, Bloomberg,

We see scope for this valuation gap between JBZ2 and its CTD (JB357) to widen further as the CTD yield approaches 25bp, with arbitraging unlikely to act as a natural correction mechanism—notwithstanding recent relaxation of terms and conditions for the BoJ's Securities Lending Facility—given that the JBZ2 expiry date is still more than three months away. Given the increasing risk of decoupling of JGB futures vs its CTD as the CTD yield approaches 25bp, moreover, we believe that JBZ2 should be trading somewhat cheaper vs its CTD (i.e., positive net basis).

Market functioning may once again deteriorate across the entire curve (as discussed in "FAQs On JGB Market Functioning") if futures-versus-CTD divergence does become increasingly pronounced, with pricing of swaps and less-liquid cash JGBs also liable to be impacted if market participants start to lose confidence in the ability of futures to serve as a hedge.

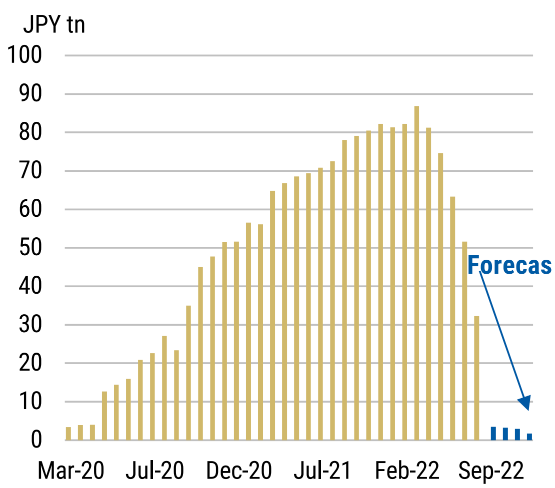
We would then expect the 10y+ portion of the curve to face further steepening pressure due to a decline in dealers' risk tolerance levels and a resultant deterioration in supply/demand for the super-long sector (where digestion of fresh issuance is already proving comparatively problematic without demand from final investors).

10y sector could be the first choice for cashed-up banks

As discussed in "How Might The JGB Market Be Impacted As Special COVID-19 Operations Are Wound Down?", outstanding balances for the BoJ's COVID-19 special program have been shrinking very rapidly of late (reaching around ¥32 trillion as of end-August), with additional repayments set to total almost ¥30 trillion in September (see Exhibit 56).

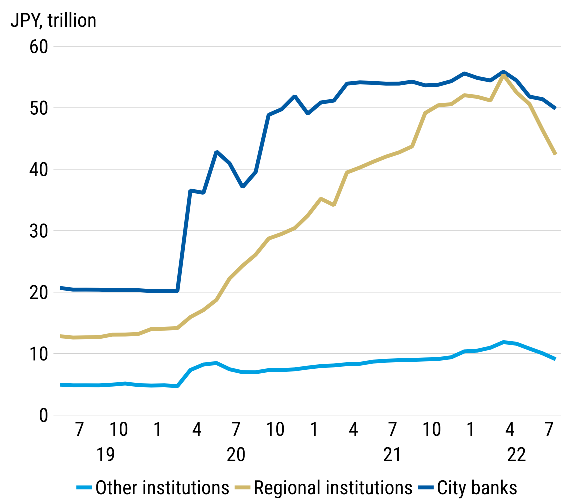
Repayments have unsurprisingly appeared greatest for regional financial institutions (see Exhibit 57), meaning that they will now have commensurately less room to park surplus cash in 0%-interest reserves at the BoJ.

Exhibit 56: The outstanding Special Funds-Supplying Operations to Facilitate Financing in Response to COVID-19"



Source: BoJ, Morgan Stanley Research

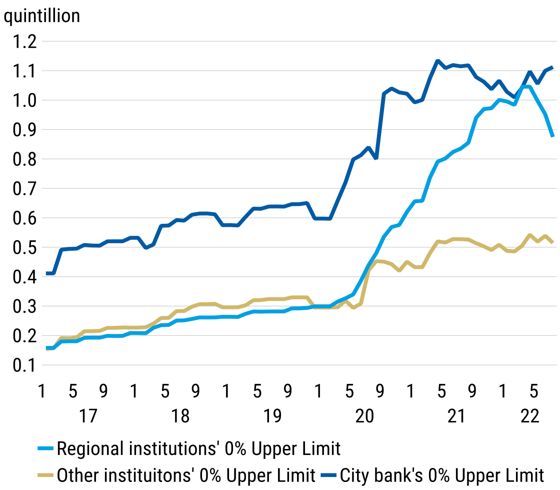
Exhibit 57: Outstandings of money borrowed from BoJ



Source: BoJ,Morgan Stanley Research

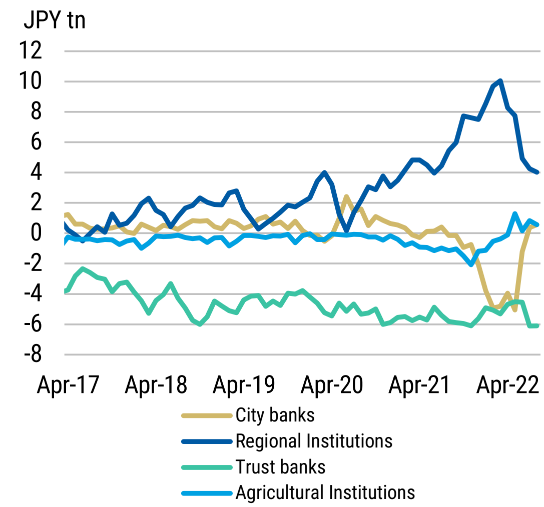
City banks have meanwhile been granted additional zero-interest headroom via a hike in the "Benchmark Ratio Used to Calculate the Macro Add-on Balance" (see Exhibit 58), with their recent comparatively subdued lending activity in the uncollateralized call market suggesting that they are not facing any particular pressure to "use up" unneeded funds (see Exhibit 59).

Exhibit 58: Upper limit of 0% balance under BoJ current account by each investor category



Source: BoJ,Morgan Stanley Research

Exhibit 59: Net cash demand on Mutan call market (+ cash borrower, - cash lender)



Source: BoJ,Morgan Stanley Research

So where might regional financial institutions look to invest? **With carry on 20y ASW longs having now lost some of its previous luster (see Exhibit 60), we expect 10y JGBs to be the destination of choice by virtue of their limited downside risk under the BoJ YCC.**

Suggested positioning

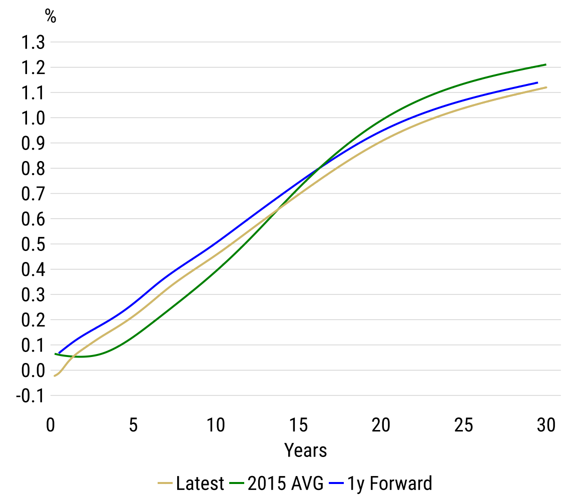
As outlined above, we expect the 10y+ portion of the JGB curve to face further bear-steepening pressure. We suggest overweighting 10y JGB longs now that the on-the-run issue is yielding close to 25bp, or more specifically switching from DV01-neutral weights to DV01 2 vs 1 for 10s20s JGB steepeners. The risk to this trade is a very marked bull-flattening on the longer-end of the curve.

We remain comfortable with 5s20s OIS steepeners, with the BoJ's normalization process appearing to have already been more-than-adequately priced into the short- to medium-term sector where OIS yields are now well above their average levels for 2015 (back when there was still no real expectation of the BOJ launching its negative interest rate policy and "yield curve control") (see Exhibit 61). The super-long portion of the OIS curve meanwhile remains somewhat flatter than the 2015 average, suggesting that there is at least some room for further steepening.

Exhibit 60: 20y JGB ASW vs TONA OIS

Source: Morgan Stanley Research

Exhibit 61: Yield curve comparison: latest vs 2015 average (TONA OIS)



Source: Morgan Stanley Research

Trade idea: Maintain TONA OIS 5s20s steepener
Trade idea: Maintain long JB367 JGB ASW
Trade idea: Shifting DV01 neutral to DV01 2 vs 1 on 10s20s JGB steepener

Currency & Foreign Exchange

G10

G10 | Real talk about government finances

Investors are often focused on large nominal government debt stocks as a potential vulnerability – which could weaken currencies. We've argued context is important. In the current context of high inflation, high nominal debt stocks may shrink in real terms, but a key assumption is that these debt stocks are nominal.

In this note, we explore how much of G10 government bond stocks are inflation-linked. Sweden and the UK stand out as having large inflation-linked stocks, with the UK topping the G10 at 30% of gilts. This suggests that high inflation may struggle to erode the UK's debt stocks, which may undermine investor-perceived credibility of the UK's public finances, which could in turn weigh on the currency. We recommend selling GBP/USD targeting 1.10 with a 1.18 stop.

United States

USD | Stronger for longer...but not stronger forever?

We think USD strength should continue for now and recommend short EUR/USD and GBP/USD positions. The two key criteria needed to see the USD peak and turn around (a bottoming in global growth and a peaking in Fed expectations) seem remote for the coming weeks. While global growth data continue to show signs of weakness, US data have remained robust, fueling an increase in Fed expectations.

We remind investors to remain vigilant, though, as some currency-positive catalysts may be approaching on the horizon. EUR may see strength as the long-standing theme of capital outflows from Europe into US fixed income may start to reverse as the Eurozone pivots from current account surplus to current account deficit and the spread between local yields and FX-hedged US yields widens further.

Meanwhile, speculation about a potential hawkish shift in BoJ policy may grow later this year as investors begin debating who might replace BoJ Governor Kuroda when his term ends in March 2023. Markets pricing in a higher chance of an end to yield curve control could support JPY.

Expectations for Chinese data may also firm in coming months in response to continued policy stimulus but also rising expectations that COVID-19 lockdowns may be a thing of the past. And finally, US data may begin showing signs of slowing down in response to the Fed's monetary tightening, giving investors comfort that 'peak hawkishness' may increasingly be behind us.

To be clear, these themes are not 'today' themes, and USD strength continues to make sense. But they could become 'tomorrow' themes, and we suggest investors remain vigilant to what may come next.

Europe

GBP | Can fiscal support turn the GBP around?

GBP has been a significant underperformer ever since the BoE's warning of an imminent recession. Growth expectations in the UK, which were already the lowest in the G10, have fallen even further. The announced fiscal stimulus may have provided a cushion to slowing growth, but this much fiscal easing does not come for free. The BoE is likely to continue with a prolonged tightening cycle, counteracting some of the growth boost.

Additionally, worries about fiscal sustainability and how the fiscal package will be funded will likely outweigh the positive impact from the fiscal-driven near-term growth boost. We expect the GBP-bearish trend to persist and initiate a formal short GBP/USD recommendation, targeting 1.10.

NOK | The summer rally is over

We again see risks skewed towards a weaker NOK into year-end following a summer breather. Our views on the primary drivers of NOK have not changed. We still think global factors (risk sentiment, in particular) will be far more important drivers of NOK than domestic developments. The Fed has now made clear it is will not tolerate a premature loosening in financial conditions. A terminal rate at or above 4.5% also cannot be ruled out, while growth across most other big markets (UK, EU and China) has been subpar.

Although Norway does look like a "safe port in the storm" in Europe, it is unlikely to be immune to a sharp move lower in risk assets and a stronger dollar. EUR/NOK could retest the highs seen in June, and even surpass them if the scenarios our equity strategists envisage materialise. Norges Bank could again point towards a higher terminal rate in September, but this is already priced in and should have little impact on the currency on its own. The announcement of higher NOK sales by Norges Bank should also matter little for the currency, in our view.

Dollar Bloc

CAD | RBA and BoC Discussion, Long USD/CAD

This week, both the RBA and the Bank of Canada signaled that their future policy paths are highly inflation dependent. As the near-term outlook for BoC policy has become increasingly dependent on inflation, we see reasons to believe that the size of the next few hikes will decline. This outlook contrasts with the rates outlook in the US. Our colleagues in US rates strategy maintain 1s10s flatteners, and see further room for the Fed to surprise in how high it may be prepared to raise rates. We therefore see room for USD/CAD to rise further as a relatively cautious Bank of Canada hiking path will contrast with the Fed, oil market fundamentals have deteriorated, and a continued hawkish tone from the Federal Reserve weighs on investor risk sentiment, boosting USD broadly.

Japan

JPY | Not fundamentally justified

We discuss the background of rapid JPY weakness, despite the absence of obvious

Japan-side catalysts. Given no clear developments on US terminal rate pricing and the recent improvement in Japan's terms of trade recently, we conclude that such rapid JPY weakness is not justified from a fundamental viewpoint.

We believe two flow dynamics are the key drivers of such rapid JPY weakness: 1) Options embedded in long-term FX contracts held by Japanese importers (among others) are likely to have been knocked out as USD/JPY climbed past the 140 threshold, thereby creating new demand for dollars. 2) The positive Europe-related headlines have perhaps led many to reconsider which currencies might best be shorted against USD, with JPY seemingly viewed as a prime candidate.

We now believe that positioning is already so heavily skewed to the JPY-short side —particularly against USD—that any short-term catalysts could end up triggering quite a significant JPY rally in the short term. Moreover, we see the risk of an MoF intervention if such rapid JPY weakness (not fundamentally justified) continues, and with markets already pricing in a terminal fed funds rate of almost 4% ahead of the September FOMC meeting. This means that it is difficult to envisage further upward repricing unless CPI data surprise on the upside and the September "dot plots" turn even more hawkish.

USD-long/JPY-short positions thus appear to have lost some of their luster from a short-term risk/reward perspective. We close our long USD/JPY position via options accordingly. Meanwhile, we will wait for the right timing to sell JPY at a much better level.

G10 FX Trades

Exhibit 62: G10 FX trade ideas

Spot trades	Spot	Target		Stop	
Enter					
Short GBP/USD	1.159	1.100	5.1%	1.180	-1.8%
Long USD/CAD	1.303	1.350	3.6%	1.275	-2.1%
Maintain					
Short EUR/USD	1.005	0.970	3.4%	1.050	-4.5%
Exit					
Long NOK/SEK	1.090				
Options trades		Entry/cost/premium received			
Exit					
Long 3m USD/JPY seagulls (long ATMF/140 call spread, sell 128 put) (priced 28-Jun-22)					

Source: Bloomberg, Morgan Stanley Research

G10 | Real talk about government finances

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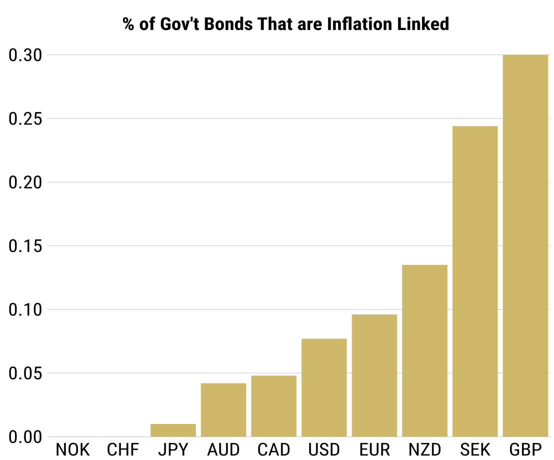
Investors are probably tired of thinking about inflation. But there's an important way that it can impact markets that may be underappreciated: government finances.

As we argued here, high inflation may be a blessing in disguise for governments with high debt burdens as nominal debt values are eroded by inflation (since the purchasing power of the principal being repaid in the future is being eroded). This is one of the reasons we're less concerned about the impact of ECB normalization and higher rates on the European periphery.

There's an important caveat, though – the bonds must be *nominal*. Inflation-linked bonds' (linkers) value doesn't erode with inflation because the principal paid is linked to inflation indices. In this note, we explore which G10 sovereigns are most and least likely to see their finances benefit from higher inflation.

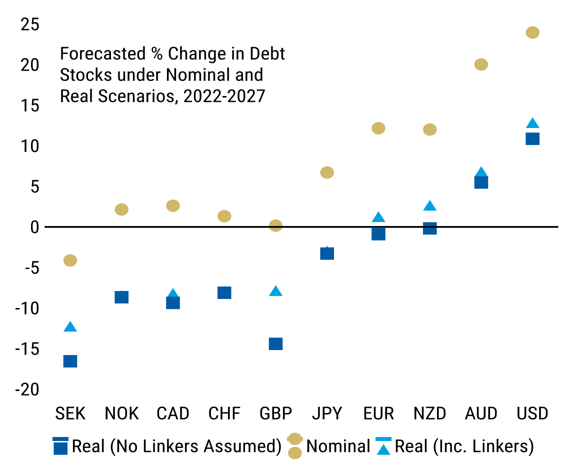
In short, the greater the proportion of government bonds that are linked to inflation, the less that high inflation erodes the nominal debt burden.

Exhibit 63: The UK and Sweden have the highest proportion of inflation-linked government bonds in the G10



Source: Macrobond, Morgan Stanley Research

Exhibit 64: Inflation is likely to erode real debt stocks for most countries, but a high degree of inflation-linked bonds reduces this effect



Source: IMF, Macrobond, Morgan Stanley Research

Exhibit 63 shows our estimates of the proportion of general government bonds that are inflation linked. The UK and Sweden stand out as having the largest share of inflation-linked government bonds, while most other economies are at 10% or less.

How might inflation affect the stock of debts in each country? To evaluate this, we use the IMF's realized and projected levels of gross government debt from 2005-2027 and headline CPI indices from each national source (using Morgan Stanley's forecasts or consensus forecasts through 2023, and assuming 2% after that). We look at three different scenarios:

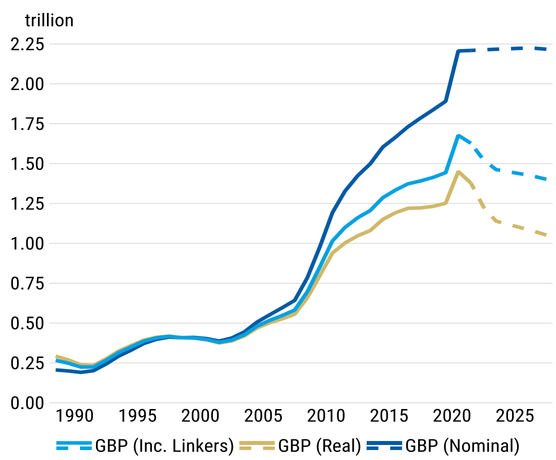
1. Nominal baseline: the expected increase in nominal government bonds outstanding through 2027
2. Real debt: how will the stock of debt look in real terms when adjusting for inflation?
3. Real debt including linkers: taking the inflation-adjusted debt stock forecasts in scenario 2, but factoring in that a proportion of the debt stock is inflation linked

These distinctions are important. While gross government debt in nominal terms might continue to rise, if adjusted for inflation, the real stock of debt might actually fall. But, still, given a potentially high degree of inflation-linked debt, then inflation may fail to shrink the real stock of debt.

Exhibit 64 shows the anticipated percentage growth in debt stocks using the IMF's forecasts in nominal terms, in real terms (assuming no inflation-linked bonds), and in real terms using our estimates of the proportionate stock of linkers. Nominal debt stocks are forecast to rise for nearly all G10 economies, but inflation is likely to limit the increase in real terms. In fact, real debt stocks are likely to fall for 6 of the 10 G10 economies: Sweden, Norway, Canada, Switzerland, the UK, and Japan. In the case of the Eurozone and New Zealand, real debt stocks grow only marginally, and inflation does a good deal to limit the real debt growth in the US and Australia.

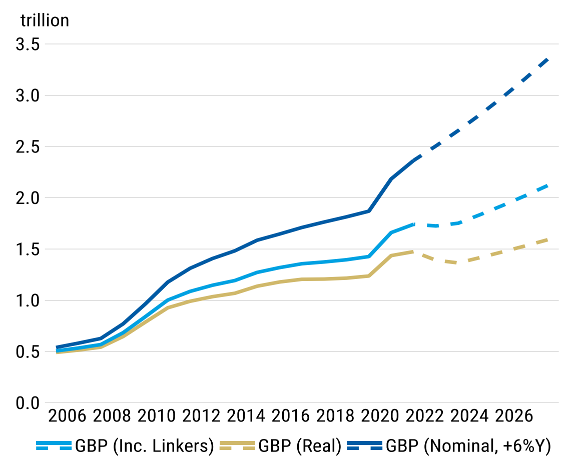
Of course, it's worth remembering that this only focuses on the liabilities, not the asset side. Nominal GDP (and thus tax revenues) is likely to rise in all of these economies over the next 5 years.

Exhibit 65: Assuming a flat path for UK government debt growth, the linker-adjusted real debt stock may be relatively flat...



Source: IMF, Macrobond, Morgan Stanley Research

Exhibit 66: ...but historical issuance trends suggest that debt stocks in the UK should rise by GBP400bn in real terms



Source: Macrobond, Morgan Stanley Research

We think the case of the UK is an important one and worth digging into. The initial results show that nominal government debt in the UK is expected to be flat, which means that in real terms the debt stock is eroded quite significantly, even factoring in the fact that 30% of government bonds are inflation linked.

This is because the IMF assumes that UK government debt remains roughly flat between 2022-2027 (Exhibit 65). This would be a meaningful break in the trend of UK government debt. Moreover, given the energy shock being experienced, it seems increasingly plausible to us that the fiscal deficit may widen as the government responds to the energy crisis.

What do these figures look like if we instead assume that gross government debt rises at a pace of roughly 6% per year, the average pace of increase seen over the past 10 years? As seen in Exhibit 66, the real stock of debt should rise nearly GBP400bn once we factor in the fact that 30% of the market is inflation linked.

Why is this important? Because this comes in a context when investors are increasingly focused on the UK's fiscal outlook and where the financing for an increasingly large stock of debt will come from given the UK's weak international investment position and persistent current account deficits (see more here). This presents a clear risk to GBP/USD, and we think it will trade to 1.10 as concerns over the fiscal outlook, growth and inflation persist. The risk to the trade is improving UK growth.

Trade idea: Enter short GBP/USD at 1.159 with a target of 1.10 and stop of 1.18

In conclusion: Investor concerns about nominal government debt stocks, in general, might be overblown once we factor in high inflation. But for some countries with a high degree of inflation-linked debt, that benefit is far more muted. The UK stands out to us as particularly vulnerable given its highest-in-G10 inflation-linked bond proportion as well as the risk that government debt stocks may keep rising amid softer growth and the energy crisis.

USD | Stronger for longer…but not stronger forever?

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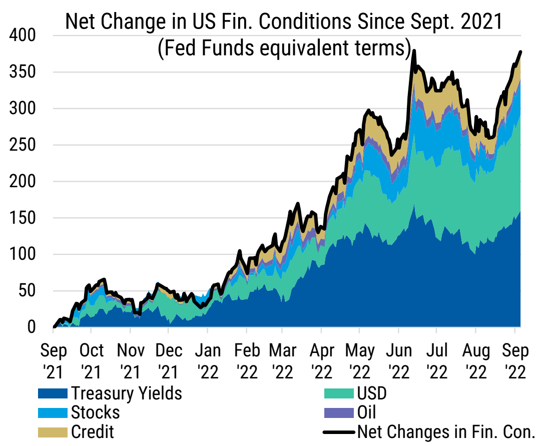
We have been arguing that USD strength is likely to continue until two key criteria are *both* met: 1) global growth expectations bottom; *and* 2) Fed expectations peak. The former would be chiefly governed by data outside of the US, while the latter would be governed by US data (particularly inflation).

Unfortunately, neither of these seem likely in the near future and, as a result, we think USD strength may continue into the fourth quarter.

Global growth expectations have further room to fall. While Chinese data of late have underwhelmed expectations, the prospect of continued COVID-19 lockdowns may weigh on investors' growth expectations further. Indeed, we expect USD strength to continue versus CNY.

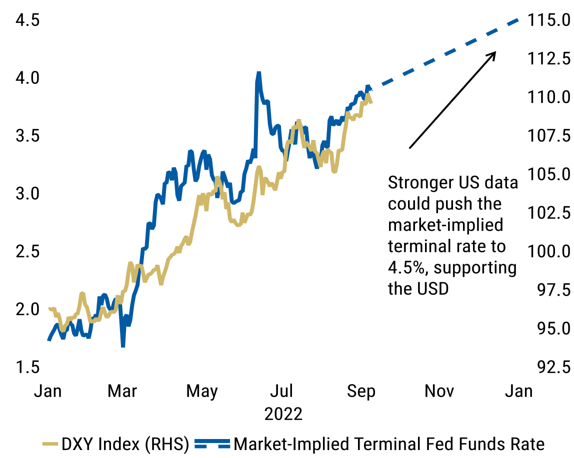
Meanwhile, ongoing issues related to gas supply in Europe continue to raise the specter of stagflation and a colder-than-expected winter could exacerbate these fears further.

Exhibit 67: Financial conditions have been on net flat since the June FOMC despite 150bp of rate hikes



Source: Bloomberg, Morgan Stanley Research

Exhibit 68: Stronger US data could raise Fed expectations further, bolstering the USD



Source: Macrobond, Morgan Stanley Research

One of the few bright spots for data remains the US, but the Fed's reaction function has been made abundantly clear: inflation is not just its top concern, it is its *only* concern. Given the stickiness of inflation, particularly those elements sensitive to the labor market, continued job gains and a low unemployment rate are unlikely to deter the FOMC from tightening policy further.

Market expectations have certainly adjusted, but there is more scope for this, particularly if the upcoming CPI print exceeds market expectations and we continue to see robust job gains. Financial conditions have failed to tighten on net and were even 100bp looser at one point since June despite the Fed hiking rates 150bp (Exhibit 67). A terminal rate at or above 4.5% cannot be ruled out should strength continue, which would likely continue to see USD-positivity (Exhibit 68).

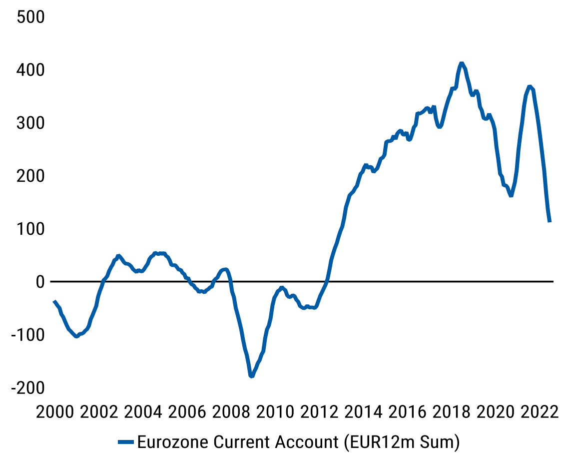
With neither USD-negative condition appearing likely in sight for now, we expect USD strength to continue. Given the relative looseness in financial conditions compared to where they ought to be (based on the Fed's desire to quell inflation), the risk currencies may end up bearing the brunt of the USD rally. We add a recommendation to sell GBP/USD (targeting 1.10 with a 1.18 stop), in part reflecting this.

Higher US rates, to which the JPY is most sensitive, is also likely to see USD/JPY trading higher if the terminal rate adjusts to 4.5%. This is particularly true if energy prices were to rise in the event of a Russian oil embargo, weighing on Japan's terms of trade.

What could turn the USD around? Will USD strength continue into 2023? Here foreign factors become quite important. In the coming weeks we expect robust US data relative to the RoW, a hawkish Fed, tighter financial conditions, and safe haven inflows into the US to support the USD. But we should not ignore some important currency specific (and potentially positive) catalysts on the horizon.

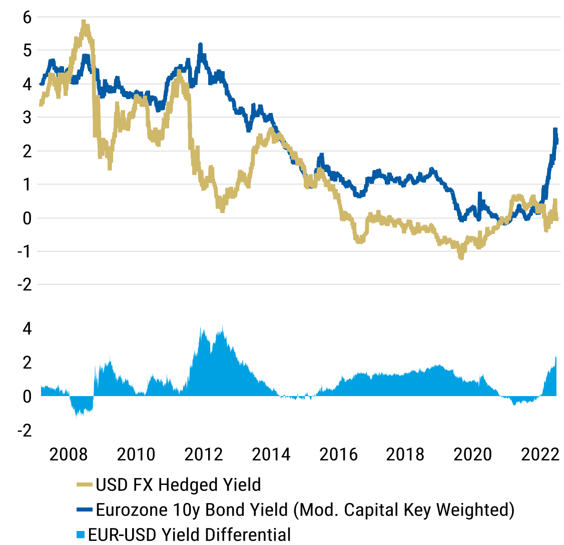
Let's start with the EUR. As we argue in great detail here (EUR: The Taming of the Shrewd (6 Sep 2022)), fund flow dynamics could play an important role supporting the EUR into 2023. Over the past decade or so, European investors have recycled their current account surplus (meaning they are net savers) into foreign fixed income assets with higher returns – most noticeably the US.

Exhibit 69: Eurozone capital exports may keep slowing if not reverse as the current account surplus reverses



Source: Macrobond, Morgan Stanley Research

Exhibit 70: Eurozone yields have risen meaningfully compared to FX-hedged yields in the US...



Source: Macrobond, Morgan Stanley Research

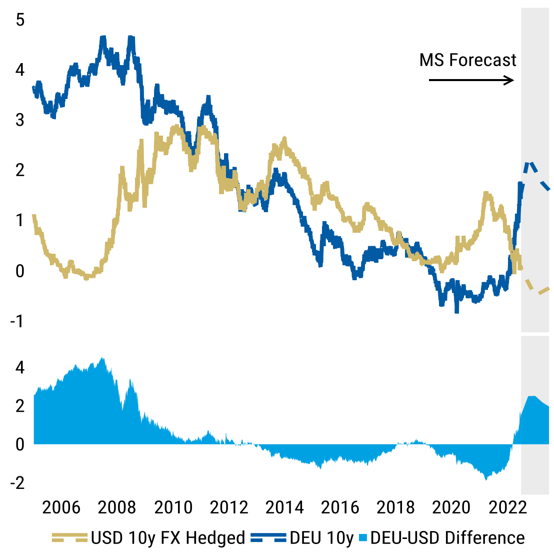
Well, that may be changing. Europe is likely to transition from a net creditor to a net debtor as the energy shock weighs on its terms of trade and the current account (Exhibit 69). Meanwhile, local yields continue to rise amid ECB normalization and rising capital demand by governments absorbing the growth shock (Exhibit 70), while FX-hedged equivalent returns abroad are going further into negative territory. This spread, we expect, should continue to widen, and a reversal of these flows could be a meaningful EUR-positive catalyst (Exhibit 71 and Exhibit 72).

It's also worth mentioning that a lot of the bad news for Europe is in the price. With expectations for gas flows in Nord Stream 1 now likely close to zero (if not floored at zero), the room for further downside surprises is getting narrower and narrower. A similar argument could be made for GBP as well.

What about JPY? The combination of adamant BoJ dovishness under Governor Kuroda and the terms of trade shock have weighed on JPY. But it's worth remembering that Governor Kuroda's term ends in March 2023. We think speculation about his potential replacement will begin to rise later in the fourth quarter. What happens if investors start to price in a non-negligible probability that Kuroda's successor will be less dovish, raising the prospect of the end of YCC and higher local rates? That could reverse some of the JPY's losses. Meanwhile Japanese policymakers' rhetoric around the weakness of the JPY seems to be rising, perhaps raising market-implied risks of intervention.

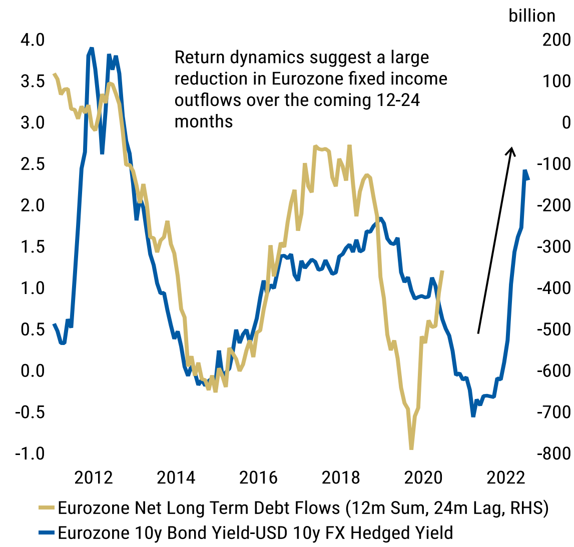
There's potential bright spots for other G10 currencies too. CHF may continue to strengthen, guided higher by the SNB's rhetoric. NOK too looks like a 'safe port in the storm' relative to European peers, although it is likely to suffer disproportionately if equity markets push lower. The BoC continues to sound hawkish and Canadian data, like that of the US, may prove more insulated from global shocks.

Exhibit 71: ...and this widening may continue as the US yield curve continues to invert and EU yields keep rising



Source: Macrobond, Morgan Stanley Research

Exhibit 72: A widening yield differential tends to be associated with changes in Eurozone capital flows



Source: Macrobond, Morgan Stanley Research

What about China? A growing market consensus that China COVID-19 lockdowns may reduce, coupled with data rebounding in response to consistent policy stimulus, might raise the specter of global growth bottoming.

And finally, data in the US may begin to slow in response to monetary tightening. 'Bad news' in data is likely to take some of the pressure off the Fed to keep hiking aggressively. Markets are anticipatory, and as we approach the end of the year and into 2023, the probability that the light at the end of the tunnel may appear soon may start to rise,.

Trade idea: Enter short GBP/USD at 1.159 with a target of 1.10 and stop of 1.18
Trade idea: Maintain short EUR/USD at 1.005 with a target of 0.97 and stop of 1.05

In short, the trend is our friend, and we think the USD-bullish trend is unlikely to break in the coming weeks, driven neither by the prospect of a dovish Fed nor the prospect of a sudden global growth rebound appearing likely. But we also shouldn't be complacent to the emerging themes around us. Key FX-positive, USD-negative risks could be lurking right around the corner: a reversal of European capital exports; rising risks of a BoJ pivot; a rebound in Chinese data; and a slowdown in US inflation, growth, and employment are all major USD-negative catalysts, particularly if transpiring together. USD strength should continue, but stay vigilant.

GBP | Can fiscal support turn the GBP around?

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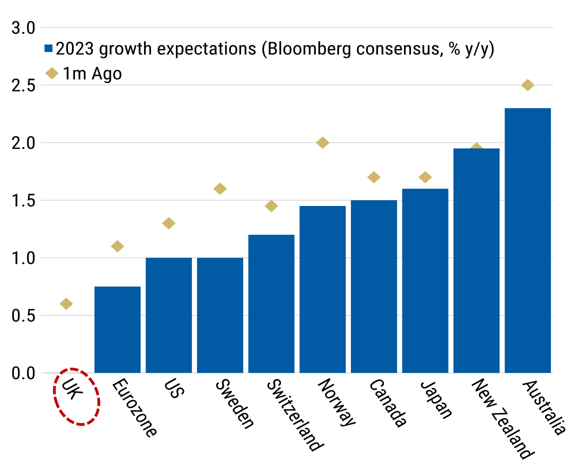
GBP has been a significant underperformer ever since the BoE's warning of an imminent recession. Growth expectations in the UK, which were already the lowest in the G10, have fallen even further. The announced fiscal stimulus may have provided a cushion to slowing growth, but this much fiscal easing does not come for free. The BoE is likely to continue with a prolonged tightening cycle, counteracting some of the growth boost.

Additionally, worries about fiscal sustainability and how the fiscal package will be funded will likely outweigh the positive impact from the fiscal-driven near-term growth boost. We expect the GBP-bearish trend to persist and initiate a formal short GBP/USD recommendation, targeting 1.10.

Growth expectations and global factors continue to be the main drivers of GBP. We have been of the view that GBP is chiefly driven by growth expectations in the UK and global factors such as the risk backdrop and USD. We see this dynamic continuing, and think extremely low growth expectations in the UK, both in absolute terms and relative to the rest of the G10, should continue to weigh on GBP (Exhibit 73).

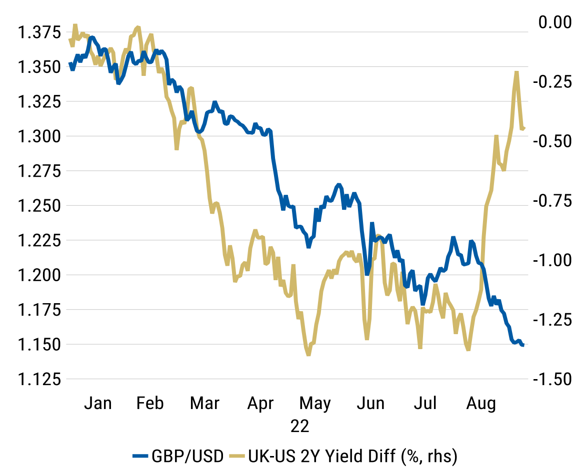
Fiscal stimulus could be the silver lining for GBP… The announced energy bills freeze, alongside other measures such as reversal of the corporate tax hike planned for 2023 and the NICs hike, which are expected to be announced by the end of this month, will certainly boost near-term growth. All of this brings us to our economists' bull case, which sees 2023 growth at -0.4% y/y (vs. a -1.5% drop had no fiscal support been announced). That said, despite these measures, our economists still expect a deceleration in growth and several negative quarters of growth.

Exhibit 73: UK growth expectations have fallen sharply and are now the lowest in the G10



Source: Bloomberg, Morgan Stanley Research

Exhibit 74: Higher front-end rate differentials have weighed on GBP/USD instead



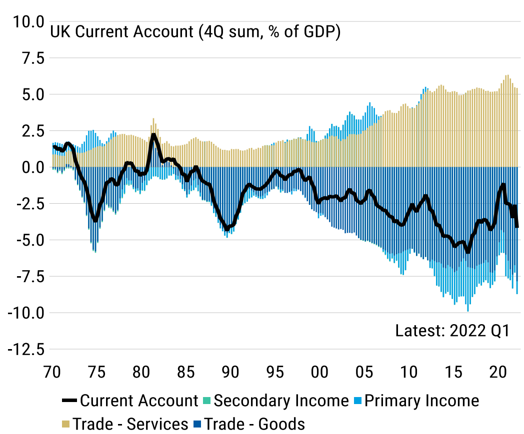
Source: Bloomberg, Morgan Stanley Research

... but it will be met with more BoE hikes. This much fiscal easing does not come for free. With core inflation likely to remain elevated, we think this means a prolonged tightening cycle for the BoE. Our economists now see the Bank Rate rising to 3.5% by mid-23 (with 50bp hikes in Sep-22 and Nov-22, followed by 3 more 25bp moves in Dec-22, Feb-23 and Mar-23) – adding 75bp more of hikes in total compared to our former base case of more targeted support.

Hiking into a stagflationary environment is hardly a good outcome for the currency. The recent sharp rise in rate differentials have not supported GBP/USD. In fact, they have had the opposite effect (Exhibit 74). We continue to see the FX reaction function as one of "higher rates, weaker FX". The more rate hike expectations rise (front-end yields rise), the worse outcome it is for growth and the currency, in our view.

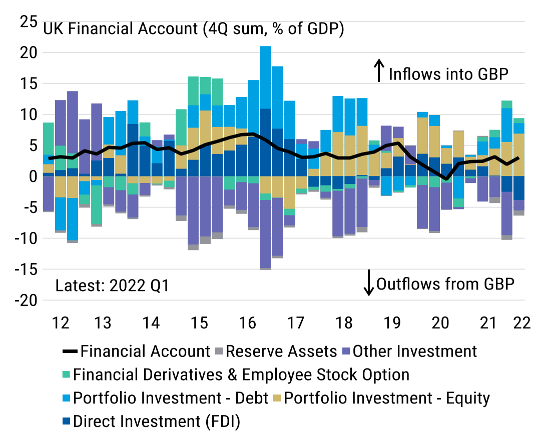
Worries over the growing twin deficits could outweigh the near-term growth boost. With the near-term growth boost likely limited by BoE rate hikes, we see worries about the growing twin deficits and the financing of them outweighing this growth boost and putting further downside pressure on GBP.

Exhibit 75: The current account deficit has been widening...



Source: Macrobond, Morgan Stanley Research

Exhibit 76: ...and this is increasingly financed by equity portfolio investment flows



Source: Macrobond, Morgan Stanley Research

Who is financing the UK's current account deficit? The UK's current account deficit has continued to widen, with the goods deficit falling more than the improvement in the services surplus (Exhibit 75). This is increasingly being financed by equity portfolio investment flows as foreign direct investment (FDI) inflows, which are usually a more stable form of financial flows, have dwindled ever since Brexit and are now a drag on the financial account (Exhibit 76). This increase in reliance on 'less stable' capital flows from abroad leaves the UK vulnerable to periods of heightened risk and uncertainty.

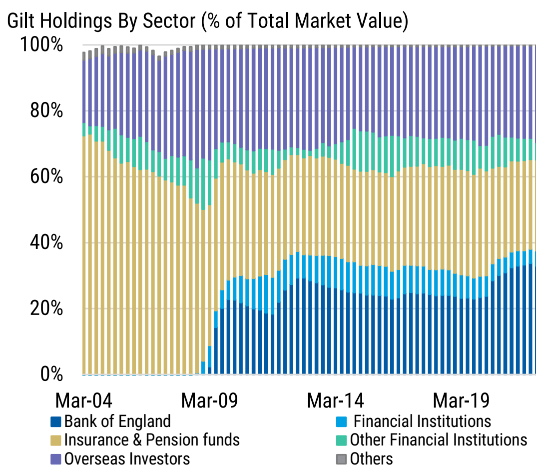
How will the fiscal package be funded? We have yet to receive any details on how the large fiscal package will be funded – Chancellor Kwarteng will likely offer more clarity alongside the emergency budget by the end of this month. If this additional spending has to be financed by issuing debt, we struggle to see who the marginal buyer of these gilt issuances will be.

When we look at ownership breakdown of total outstanding gilts (Exhibit 77), the Bank of England owns about a third of the gilts market. Now that it has started to reduce its balance sheet and will begin actively selling gilts this month, the gilts market has lost one of its main buyers.

Another third of the gilts market is currently owned by overseas investors. On that front, we note that the attractiveness of gilts, after hedging for the FX exposure, now pales in comparison to other DM bond markets. For example, from a USD investors' point of view, 10-year gilts provide an FX-hedged yield of 3.2%. This stands in contrast with its DM counterparts, with 10y bunds and 10y JGBs offering an FX-hedged yield of 4% and 4.6%, respectively (Exhibit 78).

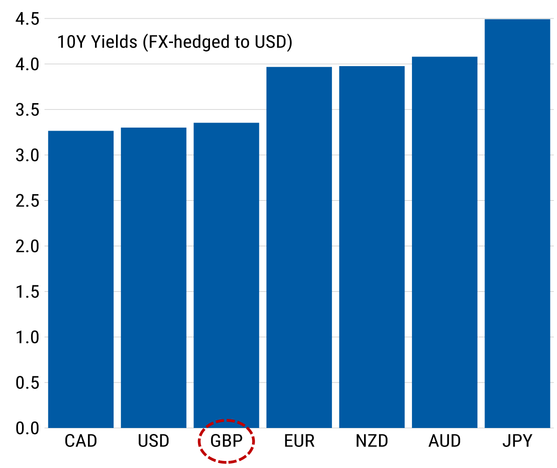
With the BoE now selling bonds instead of buying them, decreased relative attractiveness of gilts to overseas investors, and UK DB pension schemes now fully-funded, we think worries about fiscal sustainability and how this fiscal package could be funded will likely be a key concern among investors, limiting any upside boost for GBP from the fiscal stimulus.

Exhibit 77: Gilt ownership breakdown by sector



Source: DMO, Morgan Stanley Research

Exhibit 78: FX-hedged yields on gilts are less attractive than other DM bond markets



Source: Macrobond, Morgan Stanley Research

In sum, we think UK's weak growth expectations will continue to weigh on GBP. Worries about the twin deficits and the sustainability of such deficits would also likely outweigh the positive impact from the fiscal-driven near-term growth boost. We expect the GBP-bearish trend to persist and like short GBP/USD, targeting 1.10. A key risk to the trade would be if growth remained surprisingly strong, supported by a large fiscal stimulus, and funding concerns dissipate.

Trade idea: Enter short GBP/USD at 1.159 with a target of 1.10 and stop of 1.18

NOK | The summer rally is over

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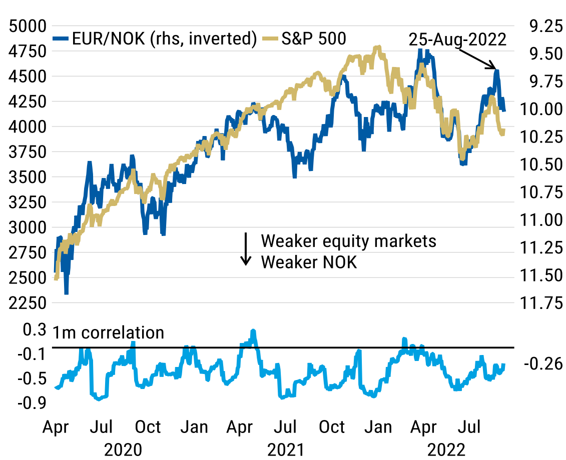
A month ago, we suggested investors add long NOK/SEK positions to play for a tactical risk rebound, as markets started to price out stagflationary concerns in the US following the weaker CPI print and solid labour market data. Our 1.09 target was indeed reached, but NOK/SEK has since retraced the move to below the 1.07 level. This has been mainly driven by weakness in NOK and we expect this to continue.

Our views on the primary drivers of NOK have not changed. In past publications, we noted that global factors (risk sentiment, oil prices) have been far more important drivers of NOK than domestic developments. As Exhibit 79 shows, EUR/NOK has continued to track the moves in the US equity market very closely.

Our equity strategists' view remains that equities are mispriced and that the bear market is not yet over. In the US, they think the lows for this bear market will be reached in 4Q22, with 3,400 being the minimum downside for S&P 500 and even the possibility of a 3,000 low if a recession indeed arrives in the US (see here). Similarly in Europe, we remain negative on the outlook for equities given a backdrop of heightened geopolitical and energy uncertainty, coupled with more forceful central bank tightening. NOK is unlikely to be immune to a renewed round of risk-off, given it is the most illiquid currency in the G10.

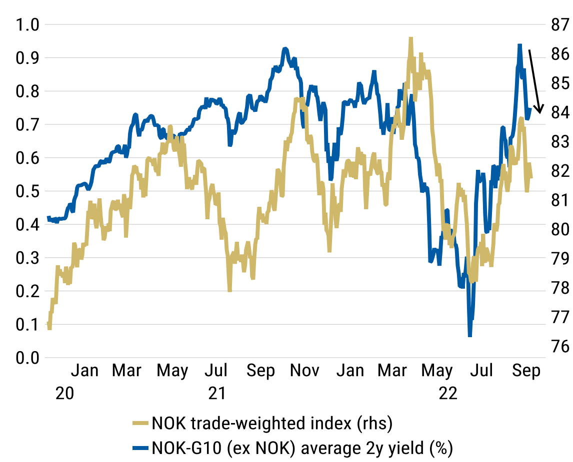
Another factor that has weighed on NOK has been a move lower in commodity prices. On the back of global recession fears, Brent crude reached new 3-month lows below $90/bbl. European gas prices have also retraced all of the increase seen in late August, despite Gazprom's announcement that flows from the NS1 pipeline will not resume.

Exhibit 79: Weaker US equities pushing NOK lower again...



Source: Macrobond, Bloomberg, Morgan Stanley Research

Exhibit 80: ... while yield differentials have also moved the other way



Source: Macrobond, Bloomberg, Morgan Stanley Research

A third factor has been the repricing in short-term rates, as Chair Powell's Jackson Hole speech has resulted in a re-tightening in US financial conditions and markets moved to price more aggressive tightening by the other central banks like the ECB and BoE. In contrast, 2y yields in Norway have actually moved lower since August 25. Yield differentials in the short-end have thus again started moving away from being in Norway's favour again (Exhibit 80).

More Norges Bank hikes unlikely to support NOK on their own. Heading into the next Norges Bank rates decision (September 22), our economists are looking for a 50bp hike at the next meeting, followed by 25bp hikes for the rest of this year and a final 25bp hike in March 2023, leaving the policy rate at 3.0%. The market is instead now pricing a higher terminal rate of 3.5%, with 50bp hikes both in September and October (Exhibit 81).

Similarly to past meetings, we will be watching:

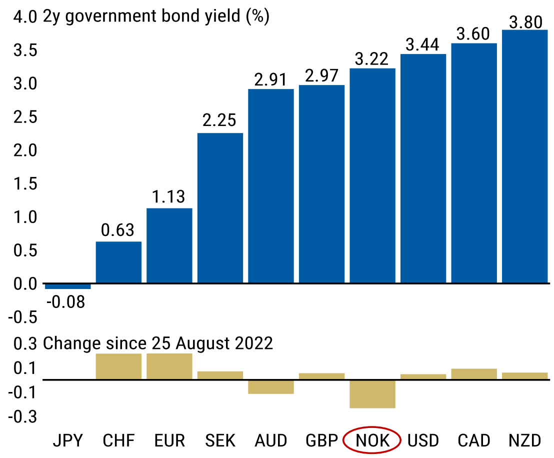
1. **Signal of magnitude of November hike in the statement.** Will the central bank continue to signal additional rate hikes? We think it will, and the focus will be if it points towards a 25bp or 50bp hike, or keeps the guidance more open-ended.

2. **New terminal rate projection.** An updated policy rate forecast path will be published this time, and where the terminal rate is set will be watched. Our economists are flagging the risk that Norges Bank could imply a touch higher terminal rate at the September meeting relative to the June projections given the faster rise in inflation and faster tightening seen abroad.

3. **Balance of risks going forward.** Such balance remained two sided in the August statement, with Norges Bank highlighting risks that inflation could accelerate further, alongside the downside risks to both global and domestic growth. How this balance of risks has evolved will be watched, particularly given growth data have been coming in softer but core inflation has been stronger.

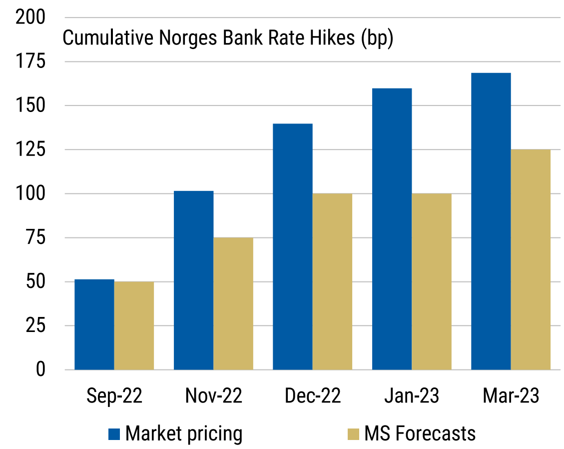
But all in all, we don't expect the meeting to have a meaningful impact on NOK, in line with our discussion above and the fact that a higher terminal rate is already priced in. Norges Bank has been a model student when it comes to guiding the market through its tightening cycle, and we don't expect any big surprises.

Exhibit 81: 2y yields in Norway have actually moved lower since August 25th, in contrast with most other G10 markets



Source: Macrobond, Bloomberg, Morgan Stanley Research

Exhibit 82: Markets are once again pricing a higher terminal rate than our economists or Norges Bank

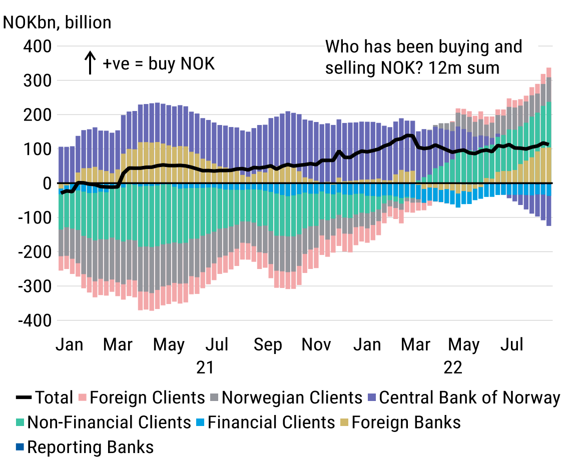


Source: MS STIRT Desk, Bloomberg, Morgan Stanley Research forecasts

NOK sales by Norges Bank should also matter little. Another focal point recently has been the acceleration of Norges Bank's NOK sales. The central bank announced it will be more than doubling the amount of FX purchases (NOK sales) in September, to NOK 3.5bn/day from NOK 1.5bn/day. The decision comes ahead of the upcoming oil tax payment date on October 1, with oil and gas companies expected to pay much higher taxes due to the sharp rally in gas prices in recent months.

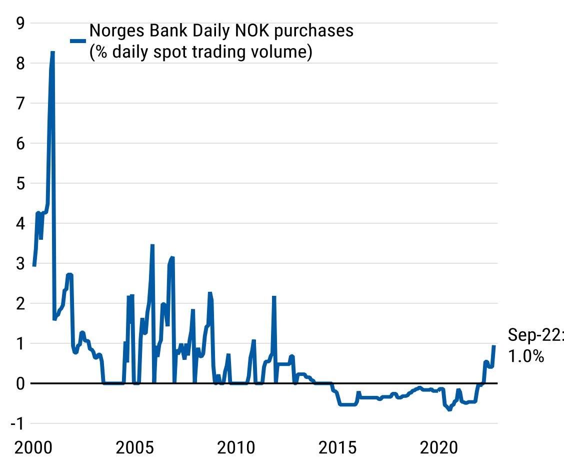
As we've discussed before, we don't think the impact of NOK selling by Norges Bank will be substantial on its own. To a large extent, it just counteracts the NOK buying from oil companies to cover their tax payment purposes. To this point, Norges Bank selling so far this year has been more than compensated for through buying from other FX market participants, notably foreign banks and non-financial clients (Exhibit 83). Second, the selling flow by the central bank remains only a small proportion of daily NOK trading volume (Exhibit 84).

Exhibit 83: Norges Bank's NOK selling has been more than compensated for by buying from other FX participants



Source: Norges Bank, Macrobond, Morgan Stanley Research

Exhibit 84: Norges Bank's daily NOK selling continues to account for just 1% of daily NOK spot trading volume



Source: Norges Bank, Macrobond, Morgan Stanley Research

Where to from here for NOK? With the summer lull over, we think risks are skewed towards a weaker NOK again heading into the end of 2022. The Fed has now made clear it will not tolerate a premature loosening in financial conditions. A terminal rate at or above 4.5% also cannot be ruled out if US data remain strong, while growth across most other big markets (UK, EU and China) should remain subpar. Although Norway does look like a "safe port in the storm" in Europe, it is unlikely to be immune to the continuation of weak risk sentiment and the stronger dollar. EUR/NOK could retest the highs seen in June, and even surpass them in the scenario our equity strategies envisage. Risk assets thus remain the main factor to track.

CAD | RBA and BoC discussion, long USD/CAD

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This week, both the RBA and the Bank of Canada signaled that their paths of future policy are highly inflation dependent. The previously stated intent – to swiftly hike rates to neutral and then assess the stance of policy – no longer appears relevant. Even growth considerations are taking a backseat to price pressures.

Instead, both central banks signaled that they see increasingly balanced risks to policy – both to the upside and downside. Bankers indicated that previously-delivered hikes could slow the economy quickly as they weigh on demand, necessitating slower hikes or even cuts. But inflation could also reaccelerate, necessitating aggressive action to contain expectations.

Downplaying neutral: Both the RBA and BoC have hiked rates to around or slightly above levels that both banks have previously estimated as neutral. As our economist notes, the RBA removed a reference to "normalizing" policy in its September statement.

Both RBA Governor Lowe and Senior Deputy BoC Governor Rogers were asked whether arriving at or above neutral meant that the central banks might reduce the size of future hikes. Neither signaled that policy rates at or above neutral was an important consideration in determining the size of their hikes. Rogers explicitly downplayed estimates of neutral as a consideration:

> RBA Governor Lowe: "I think [neutral] is at least 2.5% but I have a lot of uncertainty around what the actual number... we are closer now to estimates of neutral, but we could still be stimulatory, we could be too tight."
>
> BoC Senior Deputy Governor Rogers: "a lot of it [neutral] is state dependent and depends on the environment we're in"

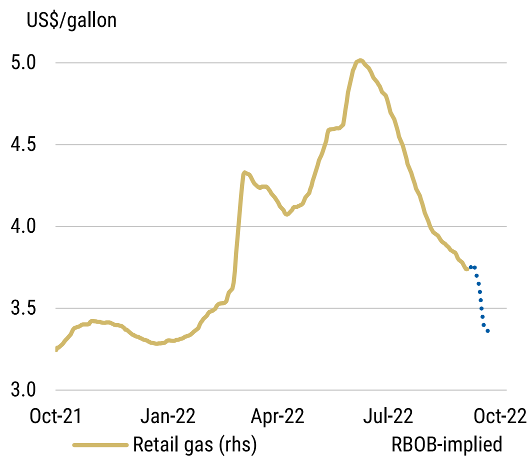
Concern about hikes already delivered: Both the BoC statement and the RBA Governor's speech signaled rising caution about the impact of hikes already delivered on growth.

RBA Governor Lowe: "We are conscious that there are lags in the operation of monetary policy and that interest rates have increased very quickly"

BoC September Statement: "As the effects of tighter monetary policy work through the economy, we will be assessing how much higher interest rates need to go to return inflation to target"

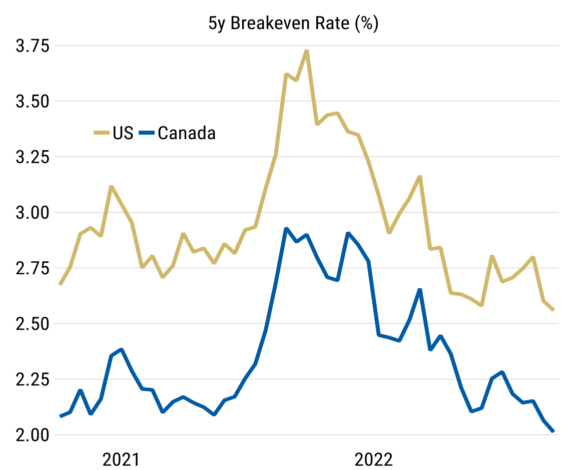
As discussed in our September meeting reaction note, the overall message from the BoC appeared to be that policy expectations will vary more widely and rapidly in response to inflation expectations – BoC speak, oil prices, CPI prints, etc.

Exhibit 85: Retail gas prices may fall further



Source: Bloomberg, Morgan Stanley Research

Exhibit 86: Canadian inflation expectations appear contained



Source: Bloomberg, Morgan Stanley Research

As the near-term outlook for BoC policy has become increasingly dependent on inflation, we see reasons to believe that the expected size of the next few hikes will decline.

First, oil prices have fallen in recent weeks, weighing on headline CPI. RBOB futures in the US suggest that retail gasoline futures have further to fall (Exhibit 85).

Second, five-year breakeven rates have compressed in both Canada in the US, and are now around 2% in Canada - even with the midpoint of the BoC's inflation target (Exhibit 86).

Third, high-frequency measures of core inflation in Canada have showed a deceleration from the 2Q peak (Exhibit 87).

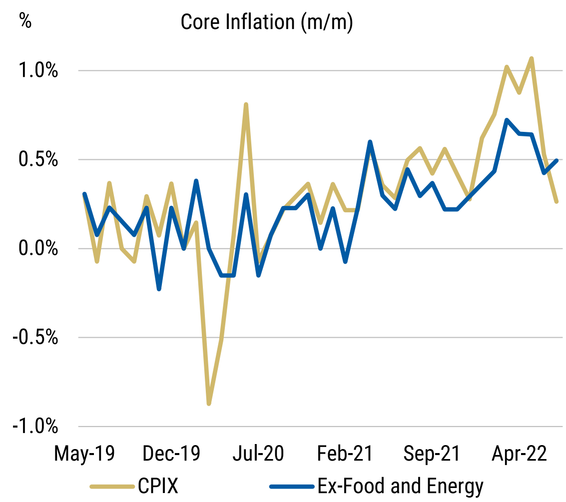
Fourth, our economists argue that pressures on global supply chains are easing.

Fifth, the August labor market report revealed that construction-related jobs declined sharply in Canada. Given that one of the three points of "primary focus" for the BoC is to "judge how monetary policy is working to slow demand," the decline in construction employment amid a broader softening in the housing sector may give the BoC more comfort in easing the pace of tightening.

For these reasons, the expected interest rate at the end of 2022 may fall further relative to the expectation at the end of 2023 (Exhibit 88). Senior Deputy Governor Rogers said that the BoC is aiming for a soft landing in Canada, implying that the Bank will be vigilant not to over-tighten policy.

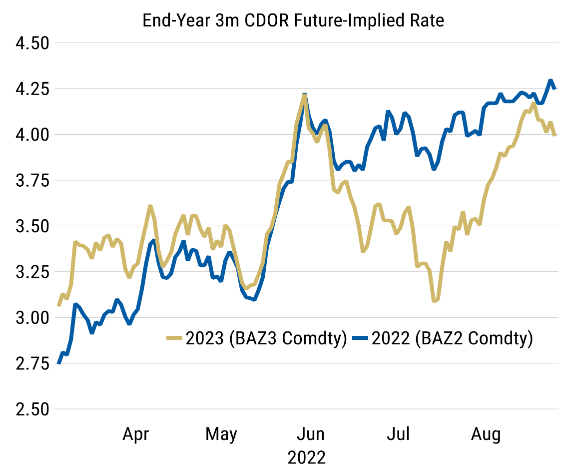
This outlook contrasts with the rates outlook in the US. Our colleagues in US rates strategy maintain 1s10s flatteners, and see further room for the Fed to surprise in how high it may be prepared to raise rates (see United States | The half-Volcker trade).

Exhibit 87: Core inflationary pressures have eased



Source: Bloomberg, Morgan Stanley Research

Exhibit 88: Late 22 rates expectations may fall relative to late 23 rates



Source: Bloomberg, Morgan Stanley Research

We therefore see room for USD/CAD to rise further. We therefore recommend long USD/CAD positions targeting 1.3500 with a 1.2750 stop.

A relatively cautious Bank of Canada hiking path will contrast with the Fed, where Chair Powell has said the FOMC will "act now, forthrightly, strongly as we have been doing."

Our oil market strategists have noted that "oil market fundamentals are no longer as strong as they were before June - high prices and aggressive central bank rate hikes have softened oil demand."

Finally, a continued hawkish tone from the Federal Reserve will likely weigh on investor risk sentiment, boosting USD broadly (see USD | Stronger for longer...but not stronger forever?) and especially softening demand for risk-sensitive currencies like CAD.

The key risk to the trade is that oil prices rise quickly, boosting Canadian growth expectations and CAD.

Trade idea: Maintain long BAZ2-BAZ3 steepener at -25bp
Trade idea: Enter long USD/CAD at 1.303 targeting 1.35 with a 1.2750 stop

JPY | Not fundamentally justified

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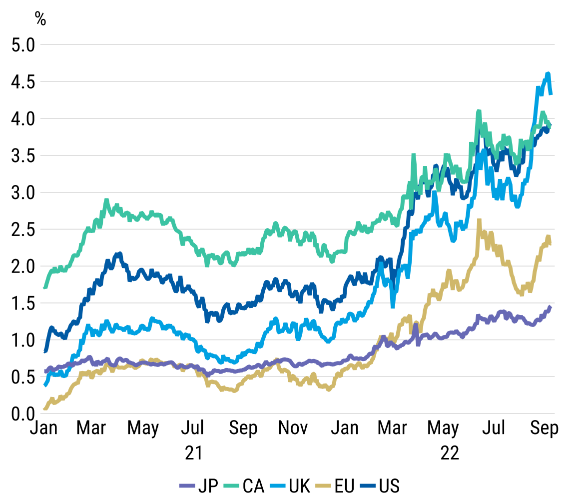
JPY weakness this week was not justified by fundamental factors

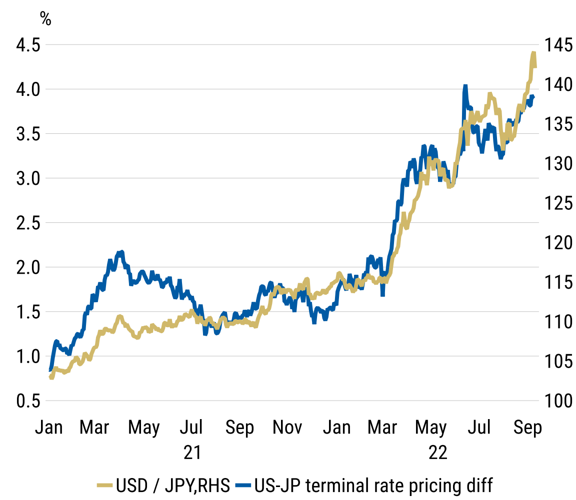
Global rates markets have upped their terminal rate forecasts since Jackson Hole (see Exhibit 89), with the Fed reiterating its intention to drive down inflation and many expecting other central banks to follow suit. The US dollar has meanwhile strengthened virtually across the board on "safe haven" demand fueled by the Fed's strong commitment to bring inflation back to 2% and the resultant tightening of financial conditions. USD/JPY has been no exception, climbing past 140 as further Fed-BoJ monetary policy divergence has been priced in (see Exhibit 90).

Exhibit 89: Global terminal rates have been repriced higher post Jackson Hole



Source: Morgan Stanley Research, Bloomberg

Exhibit 90: USD/JPY broke above 140 alongside the repricing of the US terminal rate

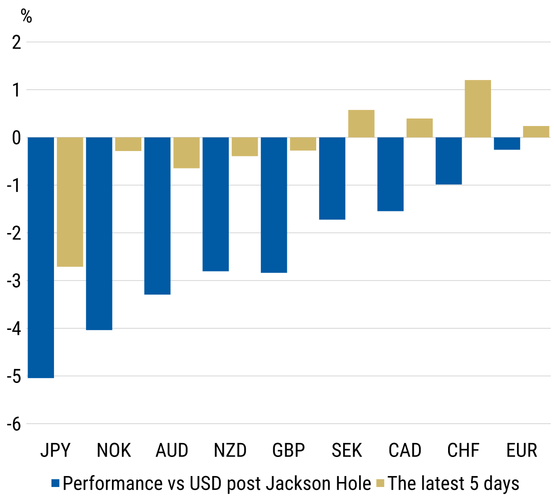


Source: Morgan Stanley Research, Bloomberg

However, this week's rise to almost 145 appears to have owed less to dollar strength than to JPY weakness (see Exhibit 91), with JPY weakening against numerous other currencies even in the absence of obvious Japan-side catalysts.

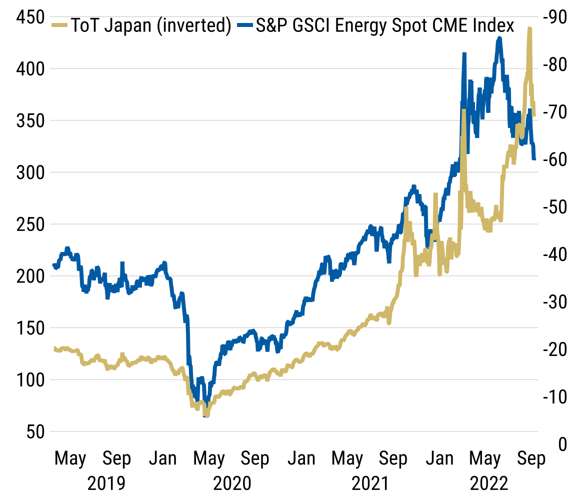
The JPY's recent weakness is perhaps all the more puzzling from a fundamentals perspective when one considers that Japan's terms of trade have actually improved of late due to a fall in energy prices (see From Growth To Inflation Concerns Once Again for a discussion of how Japan's heavy reliance on imported energy appears to have contributed to JPY depreciation) (see Exhibit 92).

Exhibit 91: While broad USD strength had led USD/JPY rally post Jackson Hole, JPY weakness led it this week



Source: Morgan Stanley Research, Bloomberg

Exhibit 92: Japan's terms of trade has improved of late alongside the weaker energy prices



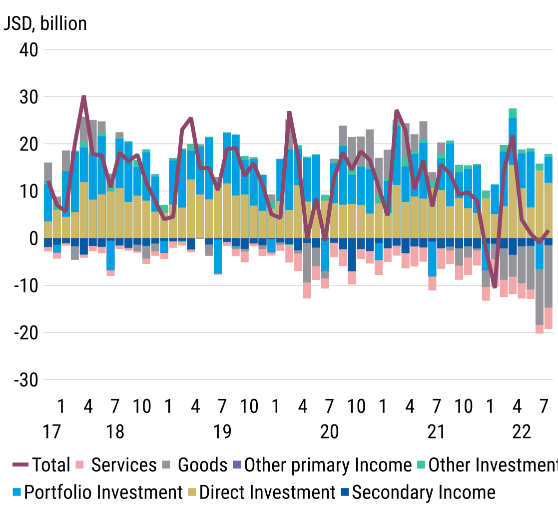
Source: Morgan Stanley Research

So what sort of flows might be responsible?

For starters, options embedded in long-term FX contracts held by Japanese importers (among others) are likely to have been knocked out as USD/JPY climbed past the 140 threshold, thereby creating new demand for dollars.

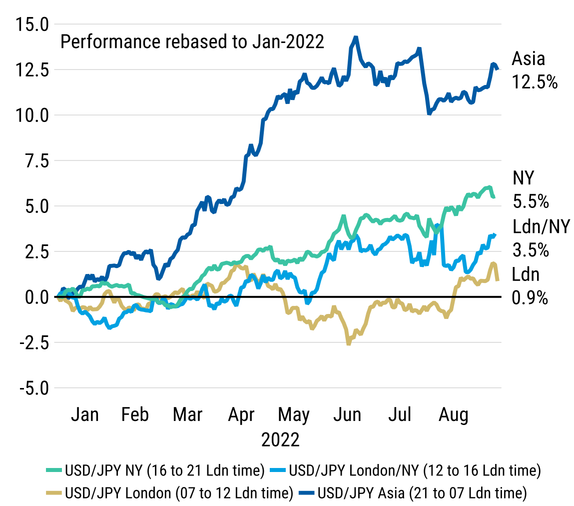
Our impression is that real money demand of this nature will be increasingly having an impact on USD/JPY now that Japan's trade deficit has become such an important determinant of the overall current account balance (see Exhibit 93). This "real demand" hypothesis is also supported by the fact that USD/JPY has recently been staging its strongest rallies during Asian trading hours (see Exhibit 94).

Exhibit 93: Trade deficit now has a non-negligible impact on the current account balance



Source: BoJ, Morgan Stanley Research

Exhibit 94: USD/JPY rallied the most during the Asia sessions this week



Source: Morgan Stanley Research, Bloomberg

Second, there are signs that so-called "conviction trades" shorting European currencies against the US dollar may have been at least partially unwound over the past few days.

European currencies had previously fallen out of favor amid concerns over a possible cessation of Russian natural gas supply and associated inflation pressures and recession risk (with our European economists forecasting two successive quarters of contraction through the winter).

However, sentiment appears to have shifted this week following Germany's announcement of a €65 billion inflation relief package as well as new UK Prime Minister Liz Truss's unveiling of "extraordinary measures" aimed at limiting household energy bills.

These positive Europe-related headlines have perhaps led many to reconsider which currencies might best be shorted against USD, with JPY seemingly viewed as a prime candidate given that the BoJ remains firmly in dove mode and elevated energy costs continue to impose non-negligible stress on the Japanese economy.

Risk-reward of long USD/JPY now less attractive

While supply/demand factors such as these do appear to have at least contributed to the JPY's recent weakness, our impression is that positioning is already so heavily skewed to the JPY-short side—particularly against USD—that any short-term catalysts could end up triggering quite a significant JPY rally (see Morgan Stanley FX Positioning Tracker).

Indeed, CCY/JPY started to erase their gains after BoJ Governor Kuroda held a discussion with Prime Minister Kishida regarding recent financial market developments. Kuroda showed serious concerns over for the recent rapid movement in FX markets, and accordingly USD/JPY has ground lower from 144 to 141.60 as of writing.

Japan's Ministry of Finance has started to express greater concern about the recent pace of yen depreciation. Officials from the BoJ, MoF, and Financial Services Agency met on Thursday to discuss global financial markets for the first time in roughly three months, with Vice Finance Minister for International Affairs Masato Kanda subsequently telling reporters that "The JPY's recent rapid moves cannot be justified by fundamentals (…) **If such moves continue, the government is ready to take action in the currency market and won't rule out any measures**" (Reuters).

The latter comment in particular corresponds to one of the strongest forms of verbal intervention under the hierarchy that we discussed in "Will Japan's Ministry of Finance Intervene in FX Markets?". **With JPY already appearing weaker than warranted by fundamentals, actual JPY-supporting intervention is liable to become all the more likely if the currency continues to exhibit strong downward momentum.** History does of course offer numerous examples of the MoF stepping in to either buy or sell the JPY when the exchange rate direction appears to be at odds with Japan's terms of trade (see Exhibit 95).

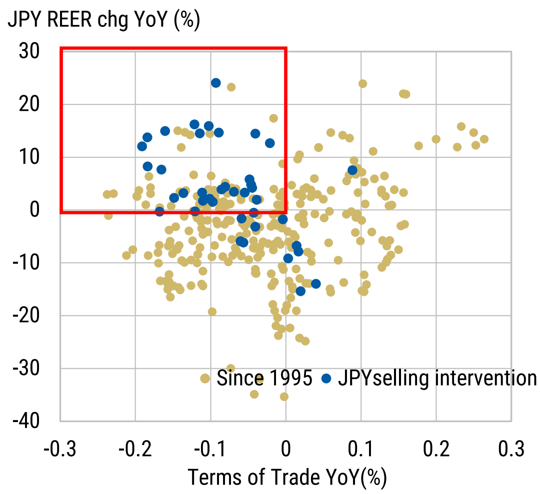
Moreover, with markets already pricing in a terminal fed funds rate of almost 4% ahead of the September FOMC meeting, it is difficult to envisage further upward repricing unless CPI data surprise on the upside and the September "dot plots" turn even more hawkish. **USD-long/JPY-short positions thus appear to have lost some of their luster from a short-term risk/reward perspective.**

With our previously recommended option-based USD/JPY-long positions already deep in the money, we now suggest exiting ahead of a possible correction and then waiting for a new dip-buying opportunity.

Still we have bearish view for JPY in medium-term

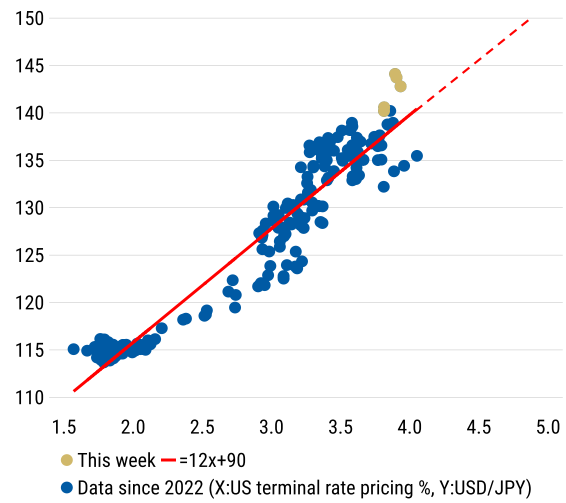
The "fair" level of USD/JPY commensurate with an envisaged terminal fed fund rate of 4% is probably somewhere around 140, with current levels near 145 seemingly difficult to justify unless people start expecting the Fed to go as high as 4.5% (see Exhibit 96). That said, USD/JPY might indeed start testing its upside once again if market data confirms the stickiness of US inflation.

Exhibit 95: JPY-selling intervention tends to be conducted when JPY has appreciated despite worsening of the terms of trade



Source: BoJ, Morgan Stanley Research

Exhibit 96: 4.5% of US terminal rate pricing implies 145 for USD/JPY



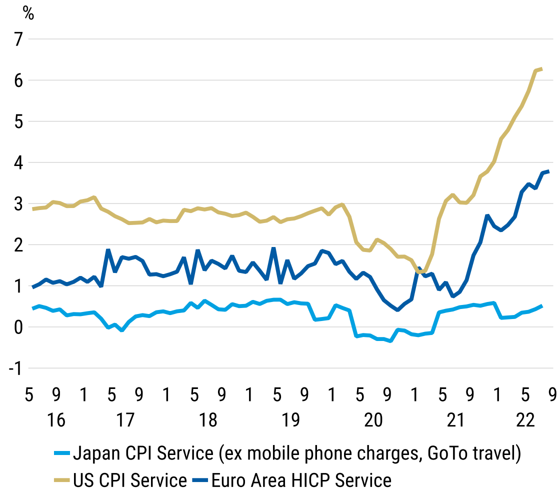
Source: Morgan Stanley Research

We meanwhile continue to envisage further JPY weakness over the medium term. Overseas central banks are likely to become more supportive of aggressive rate hike trajectories if inflation remains "sticky", whereas Japan's demand-side circumstances do not appear at all conducive to the BoJ adjusting its policy settings any time soon (see Exhibit 97).

We thus believe that monetary policy stance divergence is more likely to increase than decrease, thereby helping to keep the JPY in depreciation mode. Japan's terms of trade do appear set to keep improving for at least the time being now that most commodity prices look to have weakened, but any associated support for JPY is liable to be roughly offset by an accompanying improvement in global risk sentiment.

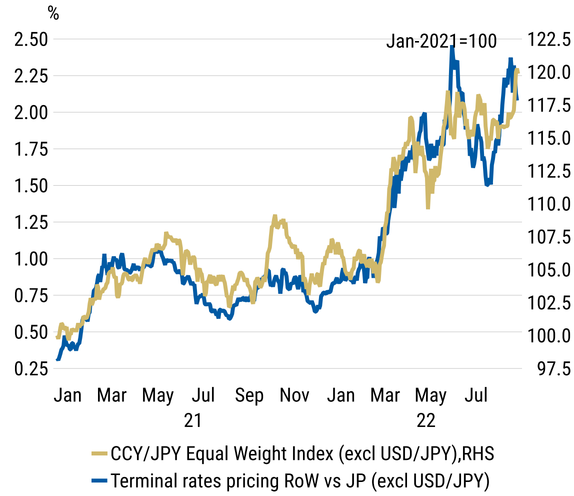
We therefore expect monetary policy divergence to remain an important driver of CCY/JPY performance (as well as USD/JPY performance) for some time to come (see Exhibit 98).

Exhibit 97: Demand driven inflation (mainly service inflation) in Japan is still muted



Source: National sources, Morgan Stanley Research

Exhibit 98: Policy divergence seems to be the key driver even of CCY/JPY pairs other than USD/JPY



Source: Morgan Stanley Research

Trade idea: Exit long 3m USD/JPY seagulls (long ATMF/140 call spread, sell 128 put)

G10 | Currency Summary

USD

4.0%

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

Watch: CPI, PPI, Jobless Claims, Retail Sales, IP, UMich

DXY **Support:** 108.00, 107.00, 106.25, 105.50, 104.75, **Resistance:** 110.75, 111.25, 113.50

We remain bullish on the USD, particularly versus European currencies like the EUR and GBP. The two conditions needed to see the USD peak – a bottoming in global growth expectations and a peaking in Fed expectations – seem unlikely to be reached anytime soon. While lockdowns continue to weigh on Chinese data, stagflationary concerns continue to rise in Europe amid the energy shock. US data, meanwhile, remain robust, fueling both safe haven flows into the USD but also continued increases in hawkish expectations for the Fed. This upcoming CPI print will be important, particularly whether the sticky, Phillips curve sensitive elements remain elevated.

EUR

-4.2%

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

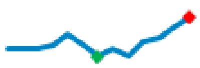
Watch: CPI Revision

EUR/USD **Support:** 0.9875/0.9900, 0.9700/25, 0.9625, 0.9500, **Resistance:** 1.0125, 1.0200, 1.0350/75, 1.0500, 1.0600

We remain bearish on EUR/USD targeting 0.97 with a 1.05 stop. Stagflation concerns continue to rise in Europe, with concerns over energy shortages continuing and ECB normalization likely to weigh on growth. This week's ECB meeting is unlikely to support the EUR given that hawkishness in a stagflationary environment is currency negative, in our view. We are closely watching eurozone CPI as well as ongoing discussions about fiscal spending to limit the potential effect of high energy prices. Longer term, a return of capital from abroad may end up supporting the EUR, but this is unlikely to be a major theme in the short run given ongoing risk aversion.

JPY

5.5%



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

Watch: CGPI, Trade balance, Weekly Mof Data

USD/JPY **Support:** 140.50, 139.00, 137.75/138.00, 135.50, **Resistance:** 144.00, 145.00, 145.50, 146.00, 151.00

After significant JPY underperformance post Jackson Hole, we temporarily turn neutral for JPY risk skew against USD, while we continue to see some upside for other CCY/JPY pairs. The rapid JPY weakness this week was not consistent with fundamental drivers, with market pricing of policy divergence between BoJ and rest of the world remaining stable this week and Japan's terms of trade improving dramatically. It suggests an increasing risk that Mof's intervention if such rapid JPY weakness, which is inconsistent with a fundamental move, will continue. We think the current fair value of USD/JPY should be around 140, given a US implied terminal rate priced around 4.0%, and thus we close our USD/JPY long position via option. That said, over the medium term, we continue to see weaker JPY given the risk of policy divergence becoming much notable if incoming inflation numbers remain sticky.

GBP

-5.5%

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

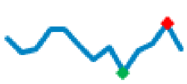
Watch: GDP, Industrial Production, Labour Market Report, CPI, Retail Sales

GBP/USD **Support:** 1.1425, 1.1350, 1.1050, 1.0900, **Resistance:** 1.1650, 1.1750, 1.1875, 1.2000/25

We remain bearish on GBP/USD and have initiated a short GBP/USD recommendation, targeting 1.10. Growth expectations in the UK, which were already the lowest in the G10, have fallen even further, a key driver of GBP, in our view. The announced fiscal stimulus may have provided a cushion to slowing growth, but this much fiscal easing does not come for free. The BoE is likely to continue with a prolonged tightening cycle, counteracting some of the growth boost. In addition, worries about fiscal sustainability and how the fiscal package will be funded will likely outweigh the positive effect from the fiscal-driven near-term growth boost.

CHF

-0.9%



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

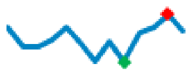
Watch: Sight Deposits

EUR/CHF **Support:** 0.9575, 0.9350, 0.9000, 0.8500/25, **Resistance:** 0.9725, 0.9800/25, 1.0050, 1.0150

We continue to see further CHF strength ahead, particularly against EUR. Our forecasts call for a bottom in EUR/CHF at 0.95, but risks are skewed toward further downside. A hawkish ECB and more front-loaded tightening should keep the SNB on a solid hiking path, with another outsized rate hike likely at its September 22 meeting given the frequency of its meetings. A deteriorating euro area growth outlook – with ECB downgrading growth forecasts and expecting stagnation in 4Q22 and 1Q23 – should also keep providing support to CHF. The SNB also appears comfortable with the strength in the currency so far. SNB President Jordan noted recently that the stronger CHF helps more than it hurts in the current environment and that the "real effective exchange rate of the franc has been astoundingly stable." We take this as a green light that the central bank will not stand in the way of additional strength.

CAD

-0.2%



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

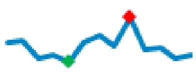
Watch: Home Sales, Housing Starts

USD/CAD **Support:** 1.2900, 1.2825, 1.2775, 1.2625, 1.2525, **Resistance:** 1.3100, 1.3200/25, 1.3350, 1.3425

We turn bearish on USD/CAD and recommend long USD/CAD positions targeting 1.3500 with a 1.2750 stop. A relatively cautious Bank of Canada hiking path will contrast with the Fed, where Chair Powell has said the FOMC will "act now, forthrightly, strongly as we have been doing." Our oil market strategists have noted that "oil market fundamentals are no longer as strong as they were before June – high prices and aggressive central bank rate hikes have softened oil demand." Finally, a continued hawkish tone from the Federal Reserve will likely weigh on investor risk sentiment, boosting USD broadly and especially softening demand for risk-sensitive currencies like CAD.

AUD

-1.4%



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

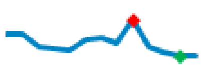
Watch: Employment

AUD/USD **Support:** 0.6700/25, 0.6550/75, 0.6500, **Resistance:** 0.7000, 0.7125/50, 0.7275, 0.7350

RBA Governor Lowe struck a relatively dovish tone this week, noting both that "there are lags in the operation of monetary policy and that interest rates have increased very quickly," and that "the case for a slower pace of increase in interest rates becomes stronger as the level of the cash rate rises." Despite these cautious notes, markets have priced roughly 170bp further in hikes from the RBA – expectations that may be disappointed as the economy slows. Recent labor market data undershooting expectations and a slowing housing sector may be early signs of this materializing. We expect AUD to soften broadly as investors adjust to less expected tightening from the RBA.

NZD

-3.3%



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

Watch: GDP

AUD/NZD **Support:** 1.1125, 1.1000, 1.0925/75, 1.0850/75, **Resistance:** 1.1250, 1.1300, 1.1350

We will be attentive to 2Q GDP this week after a large downside surprise in 1Q, which revealed that growth contracted earlier this year. Another downside surprise in growth data may moderate expectations for RBNZ tightening, as Governor Orr was relatively early in flagging that he had started to see signs that rate hikes were slowing the New Zealand economy. Given NZD's high sensitivity to risk demand, we also expect a continued rise in core DM yields (as the ECB and the Fed deliver outsized hikes) to weigh on the currency – particularly as a growing portion of the Chinese economy faces lockdown measures, weighing on AxJ investor sentiment.

SEK

4.3%

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

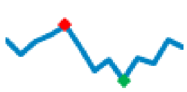
Watch: CPI, Prospera's Big Inflation Expectations Survey

EUR/SEK **Support:** 10.56, 10.50, 10.34, 10.22/24, 10.12, **Resistance:** 10.76, 10.80, 10.89/90, 10.98

We continue to see risks skewed to the downside for SEK. Global risk sentiment remains a key driver for SEK, more so than domestic factors. Markets are now expecting a series of outsized hikes from the Riksbank, with more than 80bp priced in for each of the next three meetings. We think this is overdone. In addition, given Sweden's high trade dependency on the euro area and the region's deteriorating growth backdrop, we think more hikes will only weaken growth further, which would weigh on the currency.

NOK

-0.8%



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

Watch:

NOK/SEK **Support:** 1.0575/1.0600, 1.0400, 1.0250, 1.0125/50, **Resistance:** 1.0850, 1.0975, 1.1150

We again see risks skewed toward a weaker NOK following a brief summer breather. Global factors should remain far more important drivers of NOK. The Fed has made clear it is will not tolerate a premature loosening in financial conditions. A terminal rate at or above 4.5% cannot be ruled out, while growth in other key markets has been subpar. Although Norway does look like a "safe port in the storm" in Europe, it would not be immune to a sharp move lower in risk assets and a stronger dollar, which remain the risks into year-end. Norges Bank could again point toward a higher terminal rate in September, but this is already priced in and should have little effect on the currency on its own. The higher NOK sales by Norges Bank should also matter little for the currency, in our view.

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

Breakevens across the curve have tightened since late August, driven by weakness in energy commodities and drops in the commodities complex more generally. Putting these moves in historical context, we find that present breakeven pricing is higher than what historical relationships between the BCOM and BE would suggest.

In terms of the forward inflation curve, this entails that the current slope of the curve is higher than the level of the curve would imply – a fact evidenced by the increasing importance of the second principle component (slope) vs. the first principle component (level) in a 6m rolling PCA analysis of the forward inflation curve

As of writing, the 10y real yield is currently around 90bp. This level is approaching the previous ~115bp peak observed in the hiking previous cycle. A question investors might naturally have is: is now the time to buy 10y TIPS? We believe the answer is no, and base our outlook on three core arguments: (1) historical behavior during previous cycles, (2) carry profiles, and (3) insufficient restrictiveness.

With real yields have risen over the past few weeks, we take a look at the impact of CPI seasonality in front end breakevens. We find that that breakevens in September-November have historically been tighter than what pure inflation expectations signals would suggest.

Finally, we analyze Health Insurance CPI. We look at 2022 MLR rebates, which capture information on 2021 profitability, and find they are down previous years. This suggests that healthcare CPI will come down, likely to the point of being negative, and thus provide a (small) headwind for CPI readings in the coming year.

United States | Energetic Fixings

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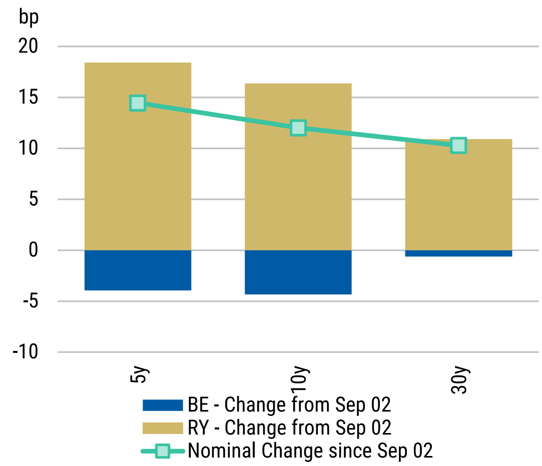
Part of this commentary was published previously in our new Inflation-Linked Market Strategist: Energetic Fixings.

Breakevens across the curve have tightened since late August (5y BE -18bp vs. 8/29), driven by weakness in energy commodities (BCOMEN -11.8% vs. 8/29) and drops in the commodities complex more generally (BCOM -6.7% vs. 8/29).

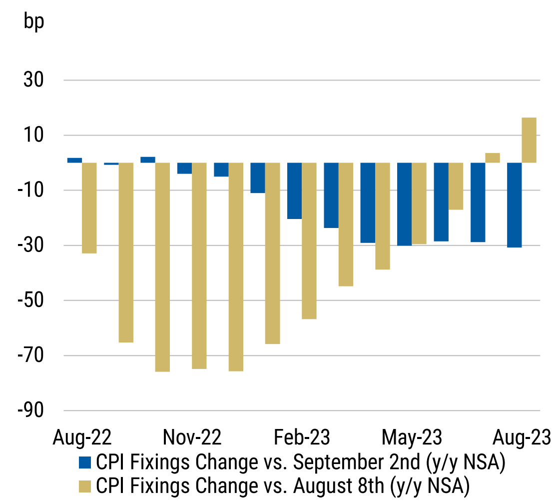
Putting these moves in historical context, we find that present breakeven pricing is higher than what historical relationships between the BCOM and BE would suggest. Regressing 1m differences in BE against monthly percentage changes in the BCOM index, we find the residuals for the 5y/10y/30y BEs at around 1 z-score.

Exhibit 99: Moves in UST, RY, and BE on the week



Source: Bloomberg, Morgan Stanley Research

Exhibit 100: September 9 fixings vs. 1 week ago and ~1m ago

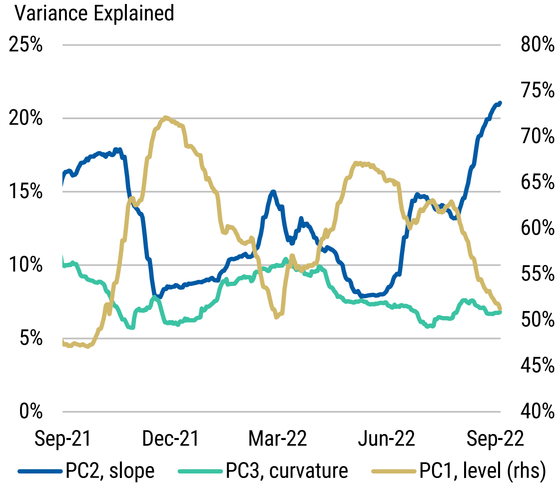


Source: Bloomberg, Morgan Stanley Research

Sub-1y fixings over the past week have moved against the sticky price action we flagged previously. The August '22 fixing moved up 2bp y/y NSA, while points further out dropped, led by a 12bp drop in the April '23 point. However, pricing vs. pre-July CPI is still suggestive of inflation being pushed into the future (see Exhibit 100).

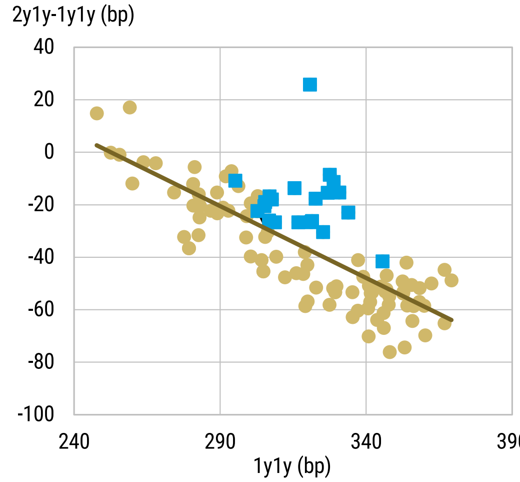
On the topic of sticky inflation, our commentary has centered around forward inflation pricing rising at a faster pace than spot inflation. In terms of the forward inflation curve, this entails that the current slope of the curve is higher than the level of the curve would imply – a fact evidenced by the increasing importance of the second principle component (slope) vs. the first principle component (level) in a 6m rolling PCA analysis of the forward inflation curve (see Exhibit 101).

Exhibit 101: Forward Curve Slope Increasingly Important vs. Level



Source: Bloomberg, Morgan Stanley Research

Exhibit 102: 1 week changes in 5y/10y/30y BE carry



Source: Bloomberg, Morgan Stanley Research

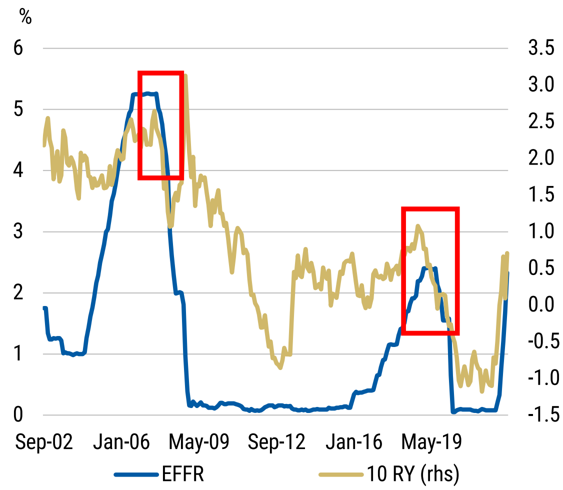
In practice, this can be seen by checking the 2y1y-1y1y curve against the 1y1y curve. In Exhibit XX, the blue dots represent curve moves since August '22, whereas the yellow dots represent moves since May '22. The blue dots have lived exclusively above the implied trend line, indicating that recent slope moves have been larger than historical relationships to the curve level would imply.

Why aren't we recommending long 10y real yields?

As of writing, the 10y real yield is currently around 90bp. This level is approaching the previous ~115bp peak observed in the hiking previous cycle. **A question investors might naturally have is: is now the time to buy 10y TIPS? We believe the answer is no, and base our outlook on three core arguments.**

First, real yields have historically peaked 3-6 months before rate cuts. TIPS are a relatively new product, having been first issued in 1998, and we thus only have yield data for two hiking cycles. In both instances, the 10y RY peaked 3 to 6 months before the first rate cut. In our economics profile, the first cut is in late 2023 – so from this perspective there's more time before real yields peak.

Exhibit 103: 10y Real Yield over previous Hiking Cycles



Source: Bloomberg, Morgan Stanley Research

Exhibit 104: 5y/10y/30y RY Carry Profile

Carry (bp)	September-22 stub	October-22	November-22	December-22	January-23	February-23	March-23
Apr27s	-3.67	-9.58	-8.18	-5.93	-5.81	-2.91	4.68
Jul32s	-1.68	-4.37	-3.73	-2.60	-2.45	-1.07	2.45
Feb52s	-0.59	-1.50	-1.22	-0.80	-0.76	-0.27	0.89

Source: Bloomberg, Morgan Stanley Research

Second, our estimates suggest that TIPS carry profiles will be negative over coming months (see Exhibit 104). While the profile is not critical, dropping 6bp through October and 12bp through December from a tactical perspective creates a small hurdle to buying 10y TIPS outright.

Finally, and crucially, we do not believe that real yields are restrictive enough. To illustrate this, one can look back to December 2018 when, with Fed funds at ~2.5%, Powell didn't even characterize the Fed's stance as "restrictive". Today Powell is looking for "sufficiently restrictive" policy. We think that suggests real rates should be higher at the peak of the current cycle than the ~1.15% peak in 2018.

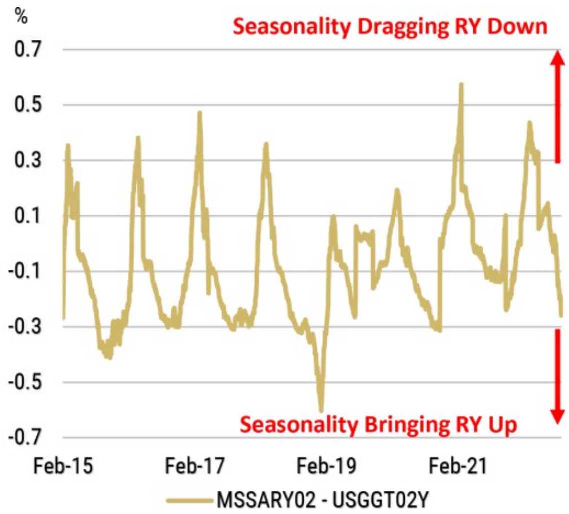
Seasonality Headwinds to BE

Real yields have risen over the past few weeks, as measured by Bloomberg rolling tickers, with the 2y point moving up ~95bp vs. two weeks ago. This comes amid Fed speak signaling that real yields are central to the central bank's outlook. TIPS yields have outpaced a more moderate rise in nominal yields, mechanically moving breakevens tighter.

Part of this rise in real yields is occurring for technical reasons related to seasonality. TIPS bonds compensate investors for inflation, as measured by the non-seasonally adjusted CPI index. As a result, TIPS yields suffer from seasonality effects, which are pronounced for front-end bonds (for more, see here). We can quantify this effect by comparing real yields against our seasonally-adjusted real yield signals (<MSSARYXX Index> on Bloomberg).

Doing so, we find that October has historically provided upward support to TIPS yields when compared to seasonally-adjusted signals (see Exhibit 105). More quantitatively, we find that over the past 7 years, the spread has been negative, with a small standard deviation. On an aggregate basis, we find that the median spread over September-November has been -26bp.

Exhibit 105: MSSARY vs. BBG Rolling 2y Series



Source: Bloomberg, Morgan Stanley Research

Exhibit 106: Seasonality Statistics for 2y TIPS during October-November

	Average Sep-Nov Spread (bp)	Stdev Sep-Nov Spread (bp)
2015	-35.69	3.53
2016	-26.42	3.39
2017	-27.17	1.82
2018	-32.08	2.63
2019	-4.80	5.55
2020	-15.74	12.88
2021	-13.00	5.77
Median	-26.42	

Source: Bloomberg, Morgan Stanley Research

What does this mean for investors? In practice, seasonality implies that TIPS yields on Bloomberg tickers cannot be interpreted as pure real yield signals, unless one adjusts for seasonality. Breakevens, in turn, are also subject to distortion. Our analysis suggests that breakevens in September-November have historically been tighter than what pure inflation expectations signals would suggest.

Trade idea: Maintain long 1y1y US CPI swaps

Trade idea: Maintain long July '24 TIPS BE vs. short July '23 TIPS BE

Short-Duration Strategy

United States
Increasing market expectations on the near-term path of rates have reinforced this year's theme of investors shortening their WAM. Over the past two weeks, the market has moved to price 75bp and 50bp for the next two FOMC meetings and a terminal rate above 4%. As expected, this has led the front-end part of the T-bill curve to outperform.

The shift higher in market expectations and continued hawkish messaging from the Fed has also contributed to the persistence of "specialness" in the repo market. This has led several on-the-run treasuries to trade below GC this week, with 2s, 3s, and 10s leading the way.

United States | Deja vu

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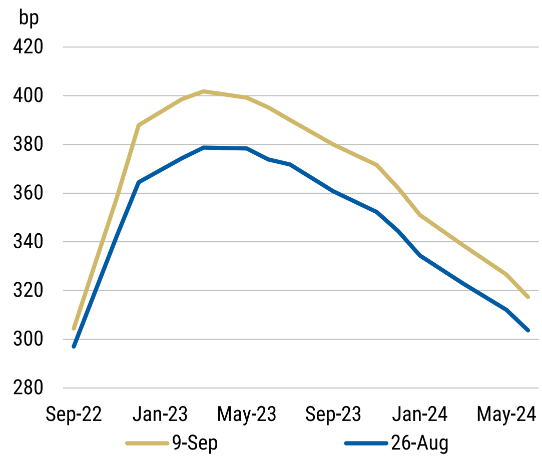
Playing it safe

Front-end markets have seen a significant shift in the near-term path for rates over the past couple of weeks. Since mid-August, overall communication from the Fed has been decisively hawkish as Chair Powell and the rest of the FOMC emphasize their resolve to restrictive policy until they see clear evidence of inflation coming down.

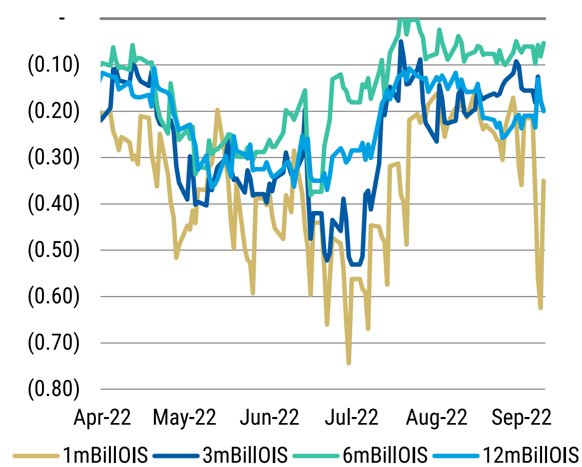
As shown in Exhibit 107, the market has rapidly increased its expectations for future hikes over the past two weeks as measured by forward OIS pricing. Investors now see 75bp and 50bp hikes for the next two FOMC meetings as their base case and a terminal or peak rate just above 4% by March of next year.

Exhibit 107: Forward path for rates has increased over the past 2 weeks (OIS forwards).



Source: Bloomberg, Morgan Stanley Research

Exhibit 108: As a result, front-end T-bills have outperformed.



Source: Bloomberg, Morgan Stanley Research

This move in market expectations could help explain the outperformance in the front-end part of the T-bill curve. Shorter T-bills have significantly richened this week with 1m T-bills trading over 60bp below OIS at one point (Exhibit 108). On the other hand, 12m T-bills have been relatively unchanged week-over-week vs. OIS. This shift in demand was also evidenced in yesterday's 4- and 8-week T-bill auctions, which stopped 5bp and 2.5bp through, respectively.

The upcoming FOMC meeting and the renewed uncertainty on the Fed's terminal rate for the current hiking cycle reinforce the theme of investors shortening their WAMs. In a similar fashion, 1m T-bills outperformed vs. OIS leading up to the June FOMC and the prior quarter-end. Hence, it is likely for shorter T-bills to continue to outperform for the rest of the month as front-end investors wait for more clarity.

The short rush

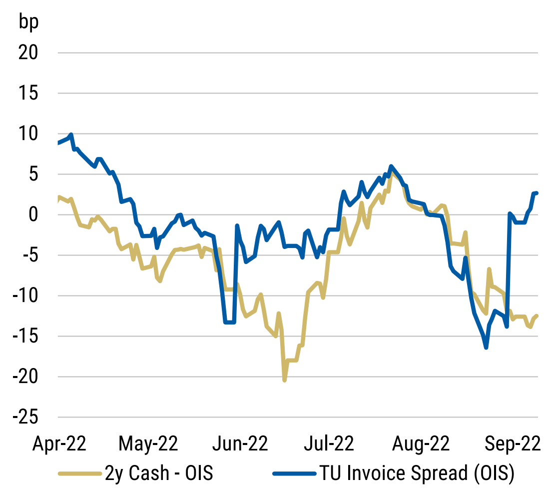
The shift in market expectations and continued hawkish messaging from the Fed has also contributed to the persistence of "specialness" in the repo market. As we highlighted a couple of week ago (see here), market expectations of higher rates motivate the creation of a short base in the market, which then leads to increased demand for these securities.

This week, we have seen several on-the-run treasuries trade "special" in repo. Yesterday (9/8) on average saw 2s trade 30bp below GC, 3s 15bp below, and 10s 35bp below. This reflects a growing investor short base across the curve that has led demand to outpace the available collateral.

This week 2s vs. OIS continued to trend lower, reaching -14bp. As shown in Exhibit 109, the move lower contrasts with the TU (2y futures) invoice OIS swap spread which has cheapened this week. This divergence paired with repo specialness continues to suggest persistent demand from short investors and is similar to the price action observed leading up to the June FOMC meeting in which cash continued to trade rich while TU were much cheaper relative to OIS.

This divergence also supports mean reversion in the coming weeks, especially after we are past the FOMC meeting and quarter-end (next settlement date for 2s).

Exhibit 109: 2y Cash continues richen while TU (2y futures) have cheapened



Source: Bloomberg, Morgan Stanley Research

Exhibit 110: Short base in the market continues to make curve appear "steeper"

Source: Bloomberg, Morgan Stanley Research

Finally, we highlight that this temporary demand for 2s continues to magnify any steepening in nominal rates. As shown in Exhibit 110, nominal 2s10s continues to be over 30bp steeper relative to OIS 2s10s.

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 111: 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 112: 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 113: 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 114: 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	3.504	2.944	3.001	2.211	Bear Market	Bear Market	Bear Market
UST 5y	3.421	2.853	3.098	2.433	Bear Market	Bear Market	Bear Market
UST 10y	3.317	2.778	3.005	2.461	Bear Market	Bear Market	Bear Market
UST 30y	3.475	3.025	3.171	2.688	Bear Market	Bear Market	Bear Market
DBR 2y	1.334	0.489	0.748	0.090	Bear Market	Bear Market	Bear Market
DBR 5y	1.555	0.803	1.067	0.417	Bear Market	Bear Market	Bear Market
DBR 10y	1.717	1.050	1.304	0.674	Bear Market	Bear Market	Bear Market
DBR 30y	1.779	1.283	1.467	0.895	Bear Market	Bear Market	Bear Market
UKT 2y	3.068	1.820	1.857	1.504	Bear Market	Bear Market	Bear Market
UKT 5y	3.007	1.722	1.907	1.525	Bear Market	Bear Market	Bear Market
UKT 10y	3.147	1.983	2.225	1.743	Bear Market	Bear Market	Bear Market
UKT 30y	3.498	2.398	2.493	1.962	Bear Market	Bear Market	Bear Market
JGB 10y	0.252	0.204	0.238	0.196	Bear Market	Bear Market	Bear Market
JGB 20y	0.947	0.834	0.869	0.722	Bear Market	Bear Market	Bear Market
JGB 30y	1.304	1.132	1.220	0.982	Bear Market	Bear Market	Bear Market
JGB 40y	1.474	1.280	1.392	1.070	Bear Market	Bear Market	Bear Market
ACGB 2y	2.912	2.595	2.857	1.932	Bear Market	Bear Market	Bear Market
ACGB 5y	3.221	3.048	3.335	2.540	Range bound	Bear Market	Bear Market
ACGB 10y	3.568	3.289	3.602	2.824	Range bound	Bear Market	Bear Market
ACGB 20y	3.880	3.597	3.888	3.205	Range bound	Bear Market	Bear Market
NZGB 2y	3.845	3.408	3.506	2.921	Bear Market	Bear Market	Bull Market
NZGB 5y	3.887	3.402	3.675	3.115	Bear Market	Bear Market	Bull Market
NZGB 10y	3.997	3.539	3.872	3.266	Bear Market	Bear Market	Bear Market
CAN 2y	3.672	2.987	3.111	2.297	Bear Market	Bear Market	Bear Market
CAN 5y	3.318	2.802	3.065	2.386	Bear Market	Bear Market	Bear Market
CAN 10y	3.198	2.799	3.068	2.473	Bear Market	Bear Market	Bear Market
CAN 30y	3.198	2.870	3.066	2.560	Bear Market	Bear Market	Bear Market

Source: Morgan Stanley Research, Bloomberg

Exhibit 115: 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	109.67	105.30	106.53	101.28	Bull Market	Bull Market	Bull Market
USDJPY	144.11	132.88	134.54	125.58	Bull Market	Bull Market	Bull Market
USDCAD	1.3092	1.2871	1.2926	1.2783	Bull Market	Bull Market	Bear Market
USDCHF	0.9707	0.9634	0.9761	0.9473	Range bound	Bull Market	Bull Market
USDNOK	10.0494	9.8504	9.8985	9.3056	Bull Market	Bull Market	Range bound
USDSEK	10.7130	10.2036	10.3090	9.7551	Bull Market	Bull Market	Bull Market
EURUSD	0.9997	1.0220	1.0370	1.0769	Bear Market	Bear Market	Bear Market
GBPUSD	1.1504	1.2066	1.2214	1.2755	Bear Market	Bear Market	Bear Market
AUDUSD	0.6751	0.6914	0.6983	0.7116	Bear Market	Bear Market	Bull Market
NZDUSD	0.6054	0.6240	0.6319	0.6544	Bear Market	Bear Market	Bear Market
EURJPY	144.08	137.84	138.84	134.81	Bull Market	Bull Market	Bull Market
NOKSEK	1.0662	1.0358	1.0373	1.0486	Bull Market	Bull Market	Bull Market
AUDNZD	1.1150	1.1060	1.1091	1.0880	Bull Market	Bull Market	Bull Market
USDBRL	5.2152	5.1026	5.3220	5.1943	Range bound	Bear Market	Bull Market
USDMXN	19.97	20.23	20.54	20.33	Bear Market	Bear Market	Bear Market
USDARS	141.12	125.11	129.71	115.63	Bull Market	Bull Market	Bull Market
USDCLP	880.93	934.43	950.15	852.73	Bear Market	Bull Market	Bull Market
USDCOP	4,397.19	4,215.93	4,363.98	4,035.18	Bull Market	Bull Market	Bull Market
USDPEN	3.8820	3.8171	3.8773	3.8375	Bull Market	Bull Market	Bull Market
USDZAR	17.52	16.24	16.71	15.81	Bull Market	Bull Market	Bull Market
USDTRY	18.2336	16.9796	17.5695	15.4433	Bull Market	Bull Market	Bull Market
USDILS	3.4434	3.4286	3.4296	3.2836	Bull Market	Bull Market	Bear Market
USDRUB	118.69	76.43	77.44	75.11	Bull Market	Bull Market	Bull Market
USDPLN	4.7070	4.5442	4.6552	4.3369	Bull Market	Bull Market	Bull Market
USDCZK	24.5229	23.7465	24.0867	22.9663	Bull Market	Bull Market	Bull Market
USDHUF	396.83	384.62	394.43	355.30	Bull Market	Bull Market	Bull Market
USDCNY	6.9576	6.7111	6.7446	6.5424	Bull Market	Bull Market	Bull Market
USDIDR	14,898.00	14,730.50	14,931.75	14,535.98	Range bound	Bull Market	Range bound
USDINR	79.72	78.75	79.51	76.83	Bull Market	Bull Market	Bull Market
USDKRW	1,380.75	1,281.15	1,305.40	1,247.98	Bull Market	Bull Market	Bull Market
USDMYR	4.5017	4.4134	4.4420	4.3064	Bull Market	Bull Market	Bull Market
USDPHP	57.14	54.29	55.64	52.81	Bull Market	Bull Market	Bull Market
USDSGD	1.4051	1.3879	1.3882	1.3715	Bull Market	Bull Market	Range bound
USDTWD	30.9100	29.5405	29.9168	28.9398	Bull Market	Bull Market	Range bound
USDTHB	36.4200	35.4965	36.2063	34.2066	Bull Market	Bull Market	Bull Market
GOLD	1,708	1,753	1,780	1,835	Bear Market	Bear Market	Bull Market
SILVER	18.54	19.51	20.33	22.23	Bear Market	Bear Market	Bull Market
CRUDE OIL	83.54	96.17	100.76	89.35	Bear Market	Bull Market	Bull Market

Source: Morgan Stanley Research, Bloomberg

G4 Smarter (beta) Trading Strategy

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

Trading Strategy 1 – "Trade Longs/Fade Shorts"

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

Trading Strategy 2 – Trade "Longs Only"

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

Exhibit 116: Trading signals for G4 smarter (beta) trading strategy

Current Risk, G4 10y Futures	G4 Strategy Weight	Trade Longs Portfolio	Fade Shorts Portfolio	Total Risk Trade Longs Only	Total Risk Trade Longs/Fade Shorts (max 200%)	Trade Longs Portfolio Entry Date	Trade Longs Portfolio Exit Date	Fade Shorts Portfolio Entry Date	Fade Shorts Portfolio Exit Date
JB 10y Future	32.50%	0%	100%	0%	100%	-	-	8/12/2021	10/4/2021
GE 10y Future	29.25%	0%	0%	0%	0%	-	-	8/27/2021	10/1/2021
US 10y Future	30.50%	100%	100%	100%	200%	8/23/2021	10/22/2021	8/11/2021	10/25/2021
UK 10y Future	7.75%	0%	100%	0%	100%	-	-	8/12/2021	10/5/2021

Source: Morgan Stanley Research

Bond Market Indicators

Our BMI(10) models are bearish for most markets. The vol-adjusted carry signal is positive for Japan. Momentum signals remained broadly bullish. Equity market signals are bullish for all markets, except for the New Zealand.

Our BMI(2) models are neutral to bullish for most markets, except for the US and New Zealand. The vol-adjusted carry signal is positive for most markets. Momentum signals are bullish for Japan. Business cycle indicators are negative for the UK and Japan.

Latest readings

Exhibit 117: Morgan Stanley Bond Market Indicators - BMI(10)

	Vol-Adjusted Carry	Momentum	Equity Markets	Business Cycle	FX	Average	Overall
US	-9.4 (-9.5)	-8.6 (-3.9)	3.5 (1.0)	2.4 (1.7)	-9.2 (-7.3)	-4.3 (-3.6)	**-4.3 (-3.6)**
DE	-9.3 (-9.3)	-4.0 (-1.9)	4.3 (2.7)	2.2 (2.2)	-10.0 (-7.8)	-3.4 (-2.8)	**-3.4 (-2.8)**
UK	-5.8 (-7.4)	-9.2 (-8.6)	2.7 (1.4)	-2.6 (-5.0)	10.0 (10.0)	-1.0 (-1.9)	**0.0 (-1.9)**
JP	6.3 (4.9)	-5.2 (-2.3)	1.2 (0.2)	-5.9 (-5.9)	6.1 (-4.2)	0.5 (-1.5)	**0.0 (0.0)**
AU	-2.8 (-4.0)	-4.3 (-3.6)	2.5 (-0.8)	5.0 (4.2)	-6.4 (0.1)	-1.2 (-0.8)	**0.0 (0.0)**
NZ	-7.1 (-7.5)	-5.8 (-3.3)	-1.1 (-3.3)	7.2 (5.8)	-7.2 (-2.6)	-2.8 (-2.2)	**-2.8 (-2.2)**
CA	-9.9 (-9.9)	-3.4 (-1.2)	2.1 (-0.3)	6.1 (6.1)	4.5 (-4.4)	-0.1 (-1.9)	**0.0 (-1.9)**

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 118: Morgan Stanley Bond Market Indicators - BMI(2)

	Vol-Adjusted Carry	Momentum	Equity Markets	Business Cycle	FX	Average	Overall
US	-2.7 (-1.2)	-10.0 (-9.5)	3.5 (1.0)	2.4 (1.7)	-10.0 (-9.8)	-3.4 (-3.6)	**-3.4 (-3.6)**
DE	7.1 (8.3)	-5.1 (-3.5)	4.3 (2.7)	2.2 (2.2)	-10.0 (-9.3)	-0.3 (0.1)	**0.0 (0.0)**
UK	7.5 (8.2)	-9.9 (-9.9)	2.7 (1.4)	-2.6 (-5.0)	10.0 (10.0)	1.5 (0.9)	**1.5 (0.0)**
JP	-0.1 (0.9)	5.6 (9.7)	1.2 (0.2)	-5.9 (-5.9)	9.7 (-7.1)	2.1 (-0.4)	**2.1 (0.0)**
AU	2.6 (5.4)	-7.1 (-6.3)	2.5 (-0.8)	5.0 (4.2)	-3.4 (-0.1)	-0.1 (0.5)	**0.0 (0.0)**
NZ	0.9 (2.4)	-8.3 (-6.3)	-1.1 (-3.3)	7.2 (5.8)	-9.2 (-7.4)	-2.1 (-1.8)	**-2.1 (0.0)**
CA	-5.3 (-3.3)	-9.4 (-8.9)	2.1 (-0.3)	6.1 (6.1)	9.9 (9.0)	0.7 (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 119: Morgan Stanley Bond Market Indicators - xBMIs

	Long US	Long DE	Long UK	Long JP	Long AU	Long NZ	Long CA
vs. US	0.0 (0.0)	0.0 (0.0)	1.6 (0.0)	2.4 (0.0)	1.5 (0.0)	0.0 (0.0)	2.1 (0.0)
vs. DE	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	1.9 (0.0)	0.0 (0.0)	0.0 (0.0)	1.6 (0.0)
vs. UK	-1.6 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
vs. JP	-2.4 (0.0)	-1.9 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	-1.6 (0.0)	0.0 (0.0)
vs. AU	-1.5 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
vs. NZ	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	1.6 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
vs. CA	-2.1 (0.0)	-1.6 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)

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

Exhibit 120: Morgan Stanley Euro Sovereign Bond Market Indicators - eBMI

	Business Cycle Surprises	Momentum	Vol. Adj. Carry	Supply	Risky Assets	Overall
Periphery vs. Core	1.0 (0.5)	-8.1 (0.3)	0.6 (0.0)	5.2 (5.2)	0.5 (-0.3)	**-0.1 (1.2)**
Semi-Core vs. Core	6.3 (7.1)	-6.7 (-2.3)	3.7 (5.0)	-1.1 (-1.1)	7.3 (8.5)	**1.9 (3.5)**
Periphery vs. Semi-Core	-2.6 (-3.3)	-0.7 (1.3)	-1.5 (-2.5)	3.2 (3.2)	-3.4 (-4.4)	**-2.1 (-2.3)**

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.

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 8.8bp wide to fair value on a 6m rolling lookback. The 2sd 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 8.2bp wide to fair value on a 6m rolling lookback. The 0.5sd 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 25.8bp tight to fair value on our 2y lookback window. The 0.5sd 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 ~0.7bp flat to fair value using a 6m lookback. The 10s30s spread curve is about ~35bp flat to fair value using our 2y lookback window.

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

Latest readings

Exhibit 121: 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	8.8	8	3.5	37.7
10y Swap Spreads	8.2	9.1	3.4	10.1
30y Swap Spreads	-25	-25.8	-21.5	-30.7
2s10s Swap Spread Curve	-0.7	1.1	-0.2	-27.6
2s30s Swap Spread Curve	-33.8	-33.9	-25.1	-68.4
10s30s Swap Spread Curve	-33.1	-34.9	-24.9	-40.8

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

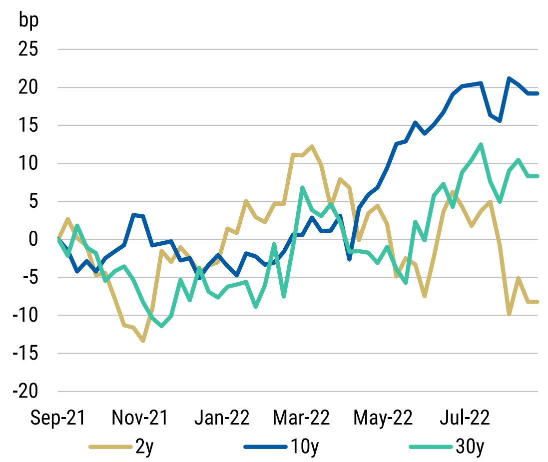
Exhibit 122: Morgan Stanley Swap Spread Indicators - Trading Signals

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

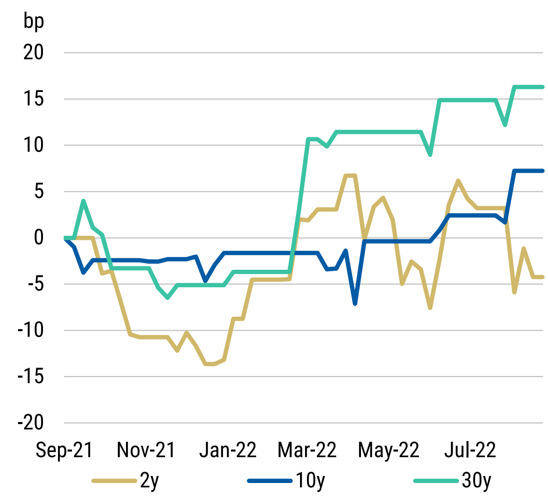
Backtesting results

Exhibit 123: 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 124: 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 spreads

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

Government Bond Supply

In the US, total coupon issuance (new 3y, re-opening of 10y, 30y) settling in mid Sept is $91bn vs. $1.1bn coupons and $38bn redemptions, resulting in net issuance of $51.9bn. **In the euro area,** we estimate €30bn of issuance (from GER, ITA, FRA, SPA) against €0.93bn coupons and €36.4bn redemptions (from FIN, ITA, GER), resulting in net issuance of -€7.4bn. **In the UK,** there will be no supply or cash flow coming to the market. **In Japan,** 5y JGB will be issued for ¥2500bn and 20y, ¥1200bn, against no cash flow. **In Canada,** 2y CAN will be issued for $2bn against no cash flow coming to the market. **In Australia,** ACGB 1.25% May 2032 will be issued for $800m against no cash flow coming to the market. In addition, ACGBi 1% Feb 2050 will be issued for $100mn. **In New Zealand,** NZGB 4.5% Apr-27, NZGB 2% May-32 and NZGB 1.75% May-41 will be issued for $200m, $150m and $50m, respectively, against no cash flow coming to the market.

Exhibit 125: Sovereign supply calendar

Monday	Tuesday	Wednesday	Thursday	Friday
12-SEP	**13-SEP**	**14-SEP**	**15-SEP**	**16-SEP**
US: New 3y UST, $41bn US: New 10y UST, $32bn	GER: BKO Sept 2024 Tap, €5.5bn ITA: BTP Auction, €6-7.5bn BTP 1.2% Aug 2025, €2.25-2.75bn; BTP 2.8% June 2029, €2.75-3.25bn; BTP 3.25% Sept 2046, €1-1.5bn JPN: 5y JGB, ¥2500bn US: New 30y UST, $18bn AUS: ACGBi 1% Feb 2050, $100mn	GER: DBR 2.5% July 2044, €1bn	FRA: Medium Term Auction, €9-10bn OAT Feb 2027, OAT 0.75% Feb 2028, OAT Nov 2029 FRA: Linker Auction, €0.75-1.25bn OATi 0.1% Mar 2025, OATei 0.1% Jul 2038, OATei 0.1% Jul 2053 SPA: SPGB Auction, €5bn* JPN: 20y JGB, ¥1200bn NZ: NZGB 4.5% Apr-27, $200mn; NZGB 2% May-32, $100mn; NZGB 1.75% May-41, $50mn CAN: 2y CAN, $4bn*	AUS: ACGB 1.25% May 2032, $800mn
19-SEP	**20-SEP**	**21-SEP**	**22-SEP**	**23-SEP**
BEL: OLO Auction, €3bn* CAN: 10y CAN, $3bn*	FIN: RFGB Auction, €1-1.5bn **UK: Possible UKT 1.5% Gilt 2053 via Syndication, £5bn* US: 20y UST Re-opening, $12bn*	GER: DBR 1.7% Aug 2032 Tap, €4bn JPN: Auction for Enhanced Liquidity, ¥500bn*	US: 10y TIPS Re-opening, $15bn* NZ: NZGB 0.5% May-26, $200mn; NZGB 3% Apr-29, $100mn; NZGB 2.75% May-51, $50mn CAN: 5y CAN, $4bn*	
26-SEP	**27-SEP**	**28-SEP**	**29-SEP**	**30-SEP**
***FRA: Possible 20-30y Syndication, €3.5bn* US: New 2y UST, $43bn*	GER: OBL 1.3% Oct 2027 Tap, €3bn NETH: New DSL 15 Jan 2054, €3-5bn ITA: BTPst Auction, €2.5bn* ITA: BTPei Auction, €1.5bn* UK: UKTi 0.125% Gilt 2031, £1.2bn* JPN: 40y JGB, ¥700bn* US: New 5y UST, $44bn*	US: New 7y UST, $36bn* CAN: 30y CAN, $2bn*	ITA: BTP Auction, €6-7bn* JPN: 2y JGB, ¥2800bn* NZ: NZGB 4.5% Apr-27, $200mn; NZGB 2% May-32, $100mn; NZGB 1.75% May-41, $50mn	

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

In Case You Missed It

Podcast | Thoughts on the Market: Matthew Hornbach: How Markets Price in Quantitative Tightening
8 Sep 2022

The impact of quantitative monetary policies is hard to understand, for investors and academics alike, but why are these impacts so complex and how might investors better understand the market implications?

UK Economics & Macro Strategy: The Big Freeze
8 Sep 2022

PM Truss confirmed the energy bills freeze for UK households. Headline inflation will be lower, and the recession far milder, but core will be higher through 2023. We lift our terminal BoE rate to 3.5%, and see cuts only in 2024..

Japan Equity Strategy: Stress Testing Our Preference for Japanese Equities – Why We See Resilience in a Global Downturn
7 Sep 2022

Japanese equities have historically underperformed in global downturns, but cheap current valuations do not reflect newfound earnings resilience from improving capital discipline and RoIC and a weaker JPY, in our view. We retain our preference for TOPIX (FX-hedged) vs. APxJ/EM equities..

Canada Economics: BoC Reaction: How Much Higher?
7 Sep 2022

As expected, the Bank of Canada ("The Bank" or "BoC") increased its policy rate by 75bps to 3.25%. Though the Bank may no longer feel the urgency to "front-load" hikes, the debate now shifts to what is next for the BoC to determine how high borrowing costs (still) need to rise..

Global Macro Strategy: Myth-Busting the Fed's QT
7 Sep 2022

We address concerns about the Fed's QT program not going to plan. Taking a detailed look, we find 1) the Fed's UST and MBS holdings have declined at the intended pace; 2) other factors, not QT, have driven the fast decline in reserves; and 3) the impact of QT on markets remains poorly understood.

Forecasts

Government bonds

Exhibit 126: 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	1.70	1.50	1.20	1.10	2.00	1.75	1.50	1.30	2.25	2.00	1.75	1.60	2.35	2.10	1.90	1.80
Japan	-0.10	-0.10	-0.10	-0.10	0.00	0.00	0.00	0.05	0.25	0.25	0.20	0.35	1.30	1.25	1.10	1.35
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 127: 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	1.50	1.30	1.00	2.25	2.00	1.75	1.60	2.25	2.75	2.50	2.20
Japan	0.15	0.10	0.05	0.05	0.25	0.25	0.20	0.35	0.25	0.35	0.45	0.50
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

Foreign exchange

Exhibit 128: 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	7.00	6.90	6.85	6.78	6.70	6.60
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	125	123	122	120	119

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

Exhibit 129: 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	6.50	6.78	7.00
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
UKT 1H 53 vs Bund Aug 48 beta weighted	105bp	9-Sep-22	Our view is driven by 1) substantial issuance discount baked into long gilt valuations; 2) current cheap UKT 1H 53 on relative value vs. neighbouring bonds, with the 30y sector also being cheap; 3) supply, which tends to lead to demand in the UK; and 4) very modest greenium reflected in the bond.	Our rolling beta correlation does not remain stable, and is exposed to outright moves.
Buy UKT 0S 33 versus 4Q 32 and 4H 34	11.5	9-Sep-22	QT kicks lead to sales of both UKT 4Q 32 and UKT 4H 34 relative to the UKT 0S 33, favouring the fly.	The continuation of high market volatility, which could keep the green gilt cheap.
Buy RX Invoice Spread	96.47	5-Sep-22	Wider non core-spreads and less QE support from the ECB should lead to wider ASW.	A major compression of the 10-year BTP/Bund spread pushes German ASW fair value lower.
October 147/145/144 Bund broken put fly	18 cents	19-Aug-22	Our view is driven by a number of factors, including the 10y bund yield being rich, ECB comments highlighting concerns around inflation, and positioning.	Bund richness persists for longer than expected.
EUR 2s5s10s Swap fly	-8.5	5-Sep-22	With the resumption of EGB supply in less than two weeks, we expect current mispricing In the belly of the cash curve to be corrected.	The supply takes longer to affect mispricing than suggested by historical relationships.
30s50s OAT steepener (long OAT May 50 vs May 72)	-6.2bp	19-Aug-22	The 30s50s OAT should renormalize on 1) a re-steepening in the 10s30s OAT to account for the possible 30y syndication effect; 2) lower to stable long-end volatility; and 3) a re-steepening in front-end rates to price in the prospects of a more aggressive ECB.	The cheapening of the 30y OAT due to the expected September syndication would outweigh our core thesis of a re-steepening in front-end rates and stable to lower long-end vol.
Long JB367 ASW	-11.2bp	19-Aug-22	The 10y JGB yield should be capped at 25bp in the event of a large bond market sell-off, while OIS tends to underperform given no direct support from the BoJ. If the market starts to price in possible BoJ tweaking on the combination of a strong CPI print and higher USD/JPY, we expect this position to perform.	Another rally in global yields.

TRADE	ENTRY LEVEL	ENTRY DATE	RATIONALE	RISKS
Short SPGB Jan 27 vs. FTFR Feb 27	33bp	12-Aug-22	We think this is an interesting expression, considering that the spread is back to 2022 lows (ex late March, when investors were concerned with the outcome of the French elections).	A further richening of Spanish bonds, supported by domestic flows or a further tightening in peripheral risk more broadly.
Long BAZ2 - BAZ3 Steepeners	-61bp	5-Aug-22	Given strong economic momentum in North America and market pricing implying central bank cuts next year, we see the potential for the spread between end-2022 and end-2023 Canadian rates expectations to compress.	Oil prices decline along with global growth expectations, weighing on Canadian inflation and central bank policy expectations into 2023.
1s10s flatteners	-44bp	5-Aug-22	We expect most of the Fed's hawkishness to be priced in the form of higher terminal rates, whereby terminal rates are likely to be above neutral rates. That would lend itself to the possibility of inverted 1s10s and 2s10s curves, which we think would happen, and should continue in 2022. We see value in this trade on a long-term horizon.	Geopolitical risk puts downward pressure on the front of the curve.
Short FFN3	96.525	5-Aug-22	With the inflation and labor market backdrop, we could see the market focus on pricing 75bp hikes into September and November. We suggest paying the July 23 FOMC meeting via selling the FFN3 contract.	The key risk is that inflation cools off, or that the Fed adopts a dovish reaction function.
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 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.
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.
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.
JGB 10s-20s steepener (2:1 DV01)	65bp	18-Jun-22	The 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.
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 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 GBP/USD	1.159	9-Sep-22	Weak growth expectations in the UK should continue to weigh on GBP. The announced fiscal stimulus may have provided a cushion to slowing growth, but this much fiscal easing does not come for free. The BoE is likely to continue with a prolonged tightening cycle, counteracting some of the growth boost. In addition, worries about fiscal sustainability and how the fiscal package will be funded will likely outweigh the positive effect from the fiscal-driven near-term growth boost, limiting any upside boost on GBP.	Growth remains surprisingly strong, supported by a large fiscal stimulus, and funding concerns dissipate.
Long USD/CAD	1.303	9-Sep-22	A relatively cautious Bank of Canada hiking path will likely contrast with the Fed, where Chair Powell has said the FOMC will "act now, forthrightly, strongly as we have been doing." Our oil market strategists have noted that "oil market fundamentals are no longer as strong as they were before June - high prices and aggressive central bank rate hikes have softened oil demand." Finally, a continued hawkish tone from the Federal Reserve will likely weigh on investor risk sentiment, boosting USD broadly and especially softening demand for risk-sensitive currencies like CAD.	The key risk to the trade is that oil prices rise quickly, boosting Canadian growth expectations and CAD.
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.

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 ZCIS	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 through 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 should 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 130: 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
EUSA5 Curncy	8-Jul-27	Pay EUR 2s5s10s	08-Jul-22	1.74	19-Aug-22	1.85				EUSA5 Curncy
EUSA10 Curncy	8-Jul-32	Pay EUR 2s5s10s	08-Jul-22	2.16	19-Aug-22	2.05				EUSA10 Curncy
EUSA2 Curncy	8-Jul-24	Pay EUR 2s5s10s	08-Jul-22	1.30	19-Aug-22	1.69				EUSA2 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
****	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

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
EUSA5 Curncy	8-Jul-27	Pay EUR 2s5s10s	08-Jul-22	1.74	19-Aug-22	1.85				EUSA5 Curncy
EUSA10 Curncy	8-Jul-32	Pay EUR 2s5s10s	08-Jul-22	2.16	19-Aug-22	2.05				EUSA10 Curncy
EUSA2 Curncy	8-Jul-24	Pay EUR 2s5s10s	08-Jul-22	1.30	19-Aug-22	1.69				EUSA2 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
UKT 1E 39	31-Jan-39	Buy 1E 39 versus 4Q 32 and 1Q 51	20-Jul-22	0.58%	12-Aug-22	0.45%	0.38%	0.65%		GB00BLPK7334
UKT 1Q 51	31-Jul-51	Buy 1E 39 versus 4Q 32 and 1Q 51	20-Jul-22	0.58%	12-Aug-22	0.45%	0.38%	0.65%		GB00BLH38158
UKT 4Q 32	7-Jun-32	Buy 1E 39 versus 4Q 32 and 1Q 51	20-Jul-22	0.58%	12-Aug-22	0.45%	0.38%	0.65%		GB0004893086

Pay EUR Swap 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
EUSA5 Curncy	8-Jul-27	Pay EUR 2s5s10s	08-Jul-22	1.74	19-Aug-22	1.85				EUSA5 Curncy
EUSA10 Curncy	8-Jul-32	Pay EUR 2s5s10s	08-Jul-22	2.16	19-Aug-22	2.05				EUSA10 Curncy
EUSA2 Curncy	8-Jul-24	Pay EUR 2s5s10s	08-Jul-22	1.30	19-Aug-22	1.69				EUSA2 Curncy

Buy 80% UKT 1H 53 versus DBR 1.25 8/48

Instrument	Maturity	Trade	Entry Date	Entry Level	Exit Date	Exit Level	Target/ Objective	Stop/Re-assess	Size of Trade or Unit/Notional	CUSIP/ISIN/ BLOOMBERG
FRTR 0.750 05/25/2052	25-May-52	30y Oat-Bund tighteners	25-Jun-21	99bp	22-Oct-21	0.89%				FR0013480613
DBR 1.250 08/15/2048	15-Aug-48	30y Oat-Bund tighteners	25-Jun-21	30bp	22-Oct-21	0.18%				DE0001102432

Buy UKT 0S 33 versus UKT 4Q 32 and UKT 4H 34

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 1E 39	31-Jan-39	Buy 1E 39 versus 4Q 32 and 1Q 51	20-Jul-22	0.58%	12-Aug-22	0.45%	0.38%	0.65%		GB00BLPK7334
UKT 1Q 51	31-Jul-51	Buy 1E 39 versus 4Q 32 and 1Q 51	20-Jul-22	0.58%	12-Aug-22	0.45%	0.38%	0.65%		GB00BLH38158
UKT 4Q 32	7-Jun-32	Buy 1E 39 versus 4Q 32 and 1Q 51	20-Jul-22	0.58%	12-Aug-22	0.45%	0.38%	0.65%		GB0004893086

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 131: Risk Event Calendar

Date	Time (Ldn)	Ccy	Event	Ref. Period	Market	Previous
10-15 S	N/A	PHP	Foreign Reserves	Aug		99B
11-Sep	N/A	SEK	Sweden General Election			
12-Sep	05:30	SEK	SEB Swedish Housing-Price Indicator			
	07:00	JPY	Machine Tool Orders (YoY)	Aug P		5.5%
	07:00	RON	CPI (YoY)	Aug	15.09%	14.96%
	07:00	GBP	GDP (Monthly Estimate)	Jul	0.3%	-0.6%
	07:00	GBP	GDP (Monthly Estimate, 3M/3M)	Jul	0.1%	-0.1%
	07:00	GBP	Construction Output (MoM)	Jul	0.5%	-1.4%
	07:00	GBP	Industrial Production (MoM)	Jul	0.3%	-0.9%
	07:00	GBP	Manufacturing Production (MoM)	Jul	0.3%	-1.6%
	07:00	GBP	Index of Services (MoM)	Jul	0.4%	-0.5%
	07:00	GBP	Visible Trade Balance	Jul	£-22.4B	£-22.8B
	07:00	GBP	Trade Balance	Jul	-11300m	-11387m
	N/A	EUR	German Current Account Balance	Jul		16.2B
	08:00	CZK	CPI (YoY)	Aug	17.7%	17.5%
	08:30	EUR	ECB's de Guindos spks			
	09:00	CHF	SNB Sight Deposits			752.8B
	09:00	EUR	Italian Industrial Production (MoM)	Jul	0%	-2.1%
	13:00	INR	CPI (YoY)	Aug	6.9%	6.71%
	13:00	EUR	ECB's Schnabel spks			
	23:45	NZD	Food Prices (MoM)	Aug		2.1%
12-13 S	N/A	GBP	BoE Inflation Expectation	Aug		4.6%
13-Sep	00:50	JPY	Domestic CGPI (YoY)	Aug	8.9%	8.6%
	00:50	JPY	Business Conditions BSI (QoQ)	3Q		-0.9
	01:30	AUD	Westpac Consumer Confidence	Sep		81.24
	02:30	AUD	NAB Business Confidence	Aug		6.9
	07:00	EUR	German CPI (YoY)	Aug F	7.9%	7.9%
	07:00	GBP	Jobless Claims Change	Aug		-10.6k
	07:00	GBP	Average Weekly Earnings (Ex. Bonuses, 3M/Y)	Jul	5.1%	4.7%
	07:00	GBP	ILO Unemployment Rate 3Mths	Jul	3.8%	3.8%
	07:00	GBP	Employment Change (3M/3M)	Jul	128k	160k
	08:00	EUR	Spanish CPI (YoY)	Aug F	10.4%	10.4%
	09:00	NOK	Regional Network Survey Output 6m out	Aug		0.8%
	10:00	EUR	German ZEW Survey Expectations	Sep	-60	-55.3
	10:00	EUR	German ZEW Survey Current Situation	Sep	-52.1	-47.6
	10:00	EUR	Eurozone ZEW Survey Expectations	Sep		-54.9
	11:00	USD	NFIB Small Business Optimism	Aug	90	89.9
	13:30	USD	CPI (YoY)	Aug	8.1%	8.5%
	13:30	USD	CPI Ex Food and Energy (YoY)	Aug	6.1%	5.9%
	23:45	NZD	Current Account Balance	2Q	-4.701B	-6.1B
14-Sep	00:50	JPY	Machine Orders (MoM)	Jul	-0.6%	0.9%

	02:10	JPY	BoJ Outright Bond Purchases 1-3y, 5-10y, 25+y			
	05:30	JPY	Industrial Production (MoM)	Jul F		1%
	07:00	GBP	CPI (YoY)	Aug	10.1%	10.1%
	07:00	GBP	CPI Core (YoY)	Aug	6.3%	6.2%
	07:00	SEK	CPI (YoY)	Aug	9.6%	8.5%
	07:00	SEK	CPIF (YoY)	Aug	9%	8%
	07:30	INR	Wholesale Prices (YoY)	Aug	12.9%	13.93%
	09:30	GBP	House Prices (MoM)	Jul		7.8%
	10:00	EUR	Industrial Production (MoM)	Jul	-1%	0.7%
	12:00	EUR	ECB's Lane spks			
	13:30	USD	PPI (YoY)	Aug	8.8%	9.8%
	13:30	CAD	Manufacturing Sales (MoM)	Jul		-0.81%
	15:30	USD	EIA Crude Oil Inventories			8845k
	15:30	EUR	ECB's Villeroy spks			
	20:00	ARS	CPI (MoM)	Aug		7.4%
	23:45	NZD	GDP (QoQ)	2Q	1%	-0.2%
14-15 S	N/A	INR	Trade Balance	Aug	$-28.1B	$-30B
14-15 S	N/A	INR	Exports (YoY)	Aug		2.1%
15-Sep	00:50	JPY	Trade Balance	Aug	-2390B	-1433.9B
	00:50	JPY	Exports (YoY)	Aug	24.1%	19%
	00:50	JPY	Japan MoF Weekly Security Flow			230.5B
	02:30	AUD	Employment Change	Aug	35k	-40.9k
	02:30	AUD	Unemployment Rate	Aug	3.4%	3.4%
	05:30	JPY	Tertiary Industry Index (MoM)	Jul	-0.1%	-0.2%
	07:00	SEK	Prospera Big Inflation Expectations Survey			
	07:00	NOK	Trade Balance	Aug		153.2B
	07:45	EUR	French CPI (YoY)	Aug F	5.8%	5.8%
	08:00	HUF	NBH 1-week Deposit Rate		11.75%	11.75%
	09:00	PLN	CPI (YoY)	Aug F		16.1%
	10:00	EUR	Trade Balance	Jul	-32.5B	-30.84B
	10:15	EUR	ECB's Guindos spks (Monetary Policy)			
	12:00	EUR	ECB's Centeno spks			
	13:00	BRL	GDP Proxy (YoY)	Jul		3.09%
	13:30	USD	Initial Jobless Claims		227k	222k
	13:30	USD	Empire Manufacturing	Sep	-15	-31.3
	13:30	USD	Retail Sales Advance (MoM)	Aug	0%	0%
	13:30	USD	Retail Sales Ex Auto (MoM)	Aug	0.1%	0.4%
	13:30	USD	Retail Sales Control Group (MoM)	Aug	0.6%	0.8%
	13:30	USD	Philadelphia Fed Business Outlook	Sep	3	6.2
	14:00	CAD	Existing Home Sales (MoM)	Aug		-5.3%
	14:15	USD	Industrial Production (MoM)	Aug	0.1%	0.6%
	14:15	USD	Capacity Utilization	Aug	80.25%	80.3%
	14:15	USD	Manufacturing Production (MoM)	Aug	-0.1%	0.7%
	15:00	USD	Business Inventories	Jul	0.6%	1.4%
	16:00	PEN	GDP (YoY)	Jul		3.44%
	16:30	ILS	CPI (YoY)	Aug	4.9%	5.2%
	22:00	KRW	Export Price Index (YoY)	Aug		16.3%
	23:30	NZD	Manufacturing PMI	Aug		52.7

16-Sep	01:30	SGD	Non-Oil Domestic Exports (YoY)	Aug	8.8%	7%
	02:30	CNY	New Home Prices (MoM)	Aug		-0.11%
	03:00	CNY	Industrial Production (YoY)	Aug	3.8%	3.8%
	03:00	CNY	Retail Sales (YoY)	Aug	3.2%	2.7%
	03:00	CNY	Fixed Assets Ex Rural YTD (YoY)	Aug	5.5%	5.7%
	03:00	CNY	Unemployment Rate	Aug	5.4%	5.4%
	07:00	GBP	Retail Sales (MoM)	Aug	-0.7%	0.4%
	09:00	EUR	Italian Trade Balance	Jul		-2165.51m
	09:00	EUR	ECB's Rehn spks (Monetary Policy)			
	10:00	EUR	CPI (YoY)	Aug F	9.1%	9.1%
	10:00	EUR	CPI Core (YoY)	Aug F	4.3%	4.3%
	10:00	EUR	Italian HICP (YoY)	Aug F	9%	9%
	11:30	RUB	CBR Rates Decision		7.5%	8%
	13:00	PLN	CPI Core (YoY)	Aug	9.9%	9.3%
	13:15	CAD	Housing Starts	Aug		275k
	13:30	CAD	Wholesale Trade Sales (MoM)	Jul		0.1%
	15:00	USD	Univ. of Michigan Confidence	Sep P	59.5	58.2
	21:00	USD	Total Net TIC Flows	Jul		22.1B
16-18 S	N/A	INT	NATO Summit			
17-Sep	17:45	EUR	ECB's Lane spks			
18-Sep	11:00	ILS	GDP (QoQ)	2Q P		6.8%
	23:30	NZD	Performance Services Index	Aug		51.2

Source: Morgan Stanley Research, Bloomberg

Government Bond Ratings

Exhibit 132: 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			STA														
	Fitch				STA													
GER	Moody	STA																
	S&P	STA																
	Fitch	STA																
FRA	Moody			STA														
	S&P			STA														
	Fitch			NEG														
AUT	Moody		STA															
	S&P		STA															
	Fitch		STA															
NETH	Moody	STA																
	S&P	STA																
	Fitch	STA																
FIN	Moody		STA															
	S&P		STA															
	Fitch		STA															
BEL	Moody				STA													
	S&P			STA														
	Fitch				STA													
SPA	Moody								STA									
	S&P						STA											
	Fitch							STA										
ITA	Moody										NEG							
	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		STA															
Canada	Moody	STA																
	S&P	STA																
	Fitch		STA															

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

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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	**1356**	**38%**	**304**	**41%**	**22%**	**596**	**39%**
Equal-weight/Hold	**1589**	**45%**	**349**	**47%**	**22%**	**716**	**47%**
Not-Rated/Hold	**0**	**0%**	**0**	**0%**	**0%**	**0**	**0%**
Underweight/Sell	**610**	**17%**	**90**	**12%**	**15%**	**225**	**15%**
TOTAL	**3,555**		**743**			**1537**	

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