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IDEA

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Global Macro Strategist | Global

The Eyewall of the Storm

The eye of a storm is surrounded by the eyewall, the most powerful and unpredictable part. Now that the eye potentially has passed, markets may still face turbulence. Hold tight to safe havens, including US Treasuries and the USD.

Global Macro Strategy

We discuss risk factors in the US that could drive investors to develop more conviction in going long government bond duration, including the impact of Bank of Japan decision. We also discuss why the CNY hasn't reacted to positive news from China.

Interest Rate Strategy

We maintain UST 2s30s steepeners, 5s30s steepeners, and long 5y UST outright. We go long duration via receiving EUR 10y10y swaps. We add a June 136/137.50 Bund call spread. We also receive Sep 23 ECB vs. July ECB. We maintain the July 23 95.625/95.875/96.125 Euribor put fly hedge. We stay received EUR 30s50s swap, our conditional 6mth forward 2s10s flatteners, and our OAT 5s20s50s fly (long 20y). We close the short Bobl ASW, and keep the 2s10s ASW box (short 2y). We stay long OAT Nov 32 vs. Bund Aug 32 and close long SPGB 2s5s10s fly. We keep August RBA payer vs. August RBNZ receiver. We close pay 2y SONIA, turn neutral duration, and suggest Jun'23-Aug'23 MPC flatteners. We maintain JGB 15s30s steepeners, TONA OIS 10s30s steepener, and long 20y JGB ASW vs ESTR.

Currency & Foreign Exchange

Stay long USD versus EUR, AUD, and CAD as markets re-price global risks higher. De-dollarization might be trendy but neither new nor becoming less gradual, and competitors are unlikely to supplant the USD anytime soon. We preview the RBA meeting and discuss why the ECB's bank lending survey should be an important catalyst for EUR. We bring forward our medium-term cautious view on CNY and recommend short CNH/THB.

Inflation-Linked Bonds

In the US, we maintain our long 10y BE vs. long 2y UST trade, and our long 20y iota trade. We keep our structural long positions in real yields in the euro area and the UK with our favorite trades being long OATei31 and IL28, respectively.

Short-Duration Strategy

Maintain long 2-month T-bills vs. OIS. We provide an update on our forecast for the X-date and T-bill supply. We also discuss the recent uptick in MMF AUM, impact of the FDIC's liquidity needs, and the latest Fed statistical releases.

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Global Macro Strategy

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A Soft Landing That Might Not Sound So Soft

Into a US recession we go? Recent data suggest "not yet"

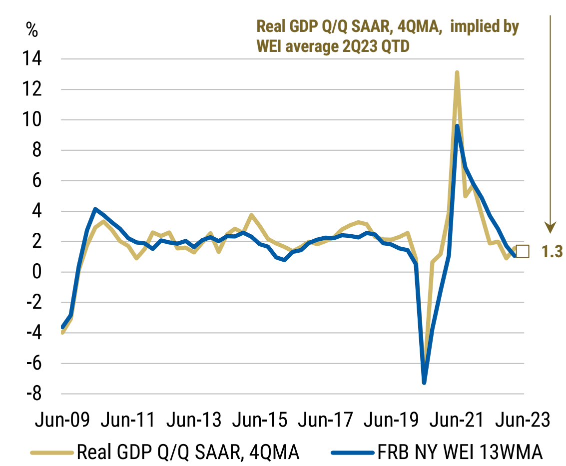
Our economists continue to look for "the softest of soft landings." At the same time, they suggest that "even small hiccups could push us into a recession." We think investors, most of whom have a similar baseline view as our economists, will become increasingly worried about louder sounds than those that come from hiccups.

After a downside miss to 1Q23 US real GDP and data on personal income and spending for March, our economists track 2Q23 real GDP at -0.1%. This contrasts with the Atlanta Fed's GDPNow model, which tracks 2Q23 real GDP at 1.7%.

Of course, economists have very little data on 2Q activity, so both estimates will change in the next few months. Still, our current tracking for 2Q makes for the third quarter in the past 6 with negative real growth. Importantly, it would be the first quarter of negative growth since monetary policy began tightening aggressively.

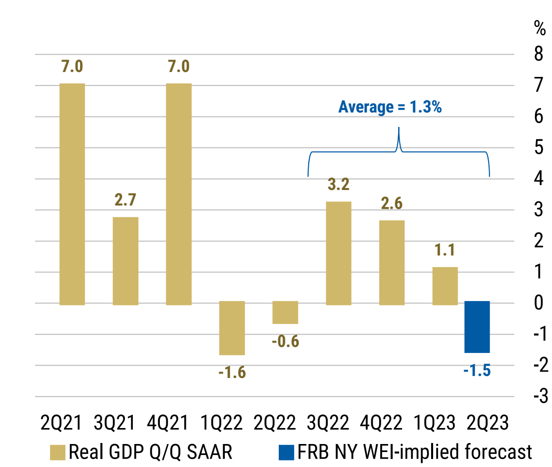
Other models for 2Q23 growth imply an even worse outcome than our economists project currently. The New York Fed suspended its Nowcasting Report in September 2021, but has continued to publish its Weekly Economic Index (WEI).

Exhibit 1: FRB New York Weekly Economic Index (WEI) vs. US real GDP growth Q/Q SAAR



Source: Morgan Stanley Research, BEA, FRB New York, Bloomberg

Exhibit 2: US real GDP Q/Q SAAR and FRB New York WEI-implied forecast for 2Q23



Source: Morgan Stanley Research, BEA, FRB New York, Bloomberg

According to the New York Fed, "The WEI is an index of ten indicators of real economic activity, scaled to align with the four-quarter GDP growth rate." Our work shows that the 1-quarter, or 13-week moving average (13WMA), of the WEI aligns best with the 4-quarter moving average (4QMA) of real GDP Q/Q SAAR (see Exhibit 1).

The 13WMA explains 82% of the 4QMA of real GDP (in-sample), and the most recent reading suggests that 2Q23 real GDP could track as low as -1.5% Q/Q SAAR. The WEI is not better at predicting real GDP than other models, and shouldn't be used to nowcast, necessarily.

For example, the WEI predicted 0.1% Q/Q SAAR for the advanced reading on 1Q23 real GDP. That compared to the Bloomberg consensus at 1.9%, the Atlanta Fed's GDPNow at 1.1%, and the actual result at 1.1%. Still, the WEI should be monitored for non-linear moves, which have yet to suggest recession is imminent.

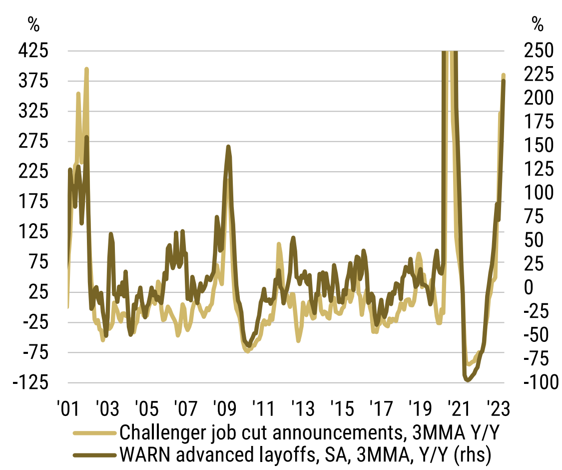
A warning about WARN notices

Our economists continue to forecast a slowdown in the labor market with nonfarm payroll gains expected to slide below 200k in April, and below 100k in June. Without a pick-up in firings, however, the probability of negative payroll prints diminishes.

Markets would likely react strongly to any negative payroll print in the coming months. As such, investors scrutinize data pointing in that direction, such as advance layoff notices filed under the Worker Adjustment and Retraining Notification (WARN) Act.

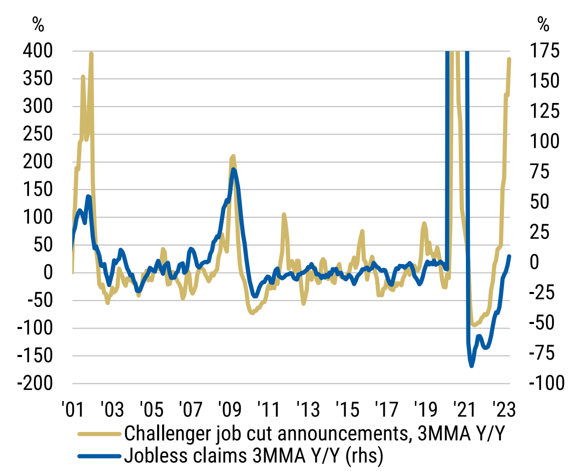
Researchers at the Cleveland Fed collected data on WARN notices and concluded that, "The number of workers affected by WARN notices ("WARN layoffs") leads state-level initial unemployment insurance claims, and changes in the unemployment rate and private employment."

Exhibit 3: WARN notices vs. Challenger job cut announcements



Source: Morgan Stanley Research, OpenICPSR, Challenger Gray & Christmas

Exhibit 4: Initial unemployment claims vs. Challenger job cut announcements



Source: Morgan Stanley Research, BLS, Challenger Gray & Christmas

Exhibit 3 shows that WARN layoffs move in a very similar way to the job cut announcement collected by Challenger, Gray & Christmas, Inc. The recent parabolic Y/Y increase in both measures, which rose above 0% in August 2022, raises questions about how long unemployment claims can remain well behaved.

Exhibit 4 shows the historical relationship between Challenger job cut announcements and unemployment claims on a Y/Y basis. The two series moved in line with one another during the Great Financial Crisis and the COVID-19 pandemic period.

But during other periods, Challenger job cuts behaved in a more volatile way than unemployment claims. The disconnect could come from the differences in what each data set measures. Challenger and WARN data measure layoffs – not how many people file for unemployment claims.

If someone loses their job, but (1) finds another job before filing for unemployment benefits, (2) receives compensation from a severance package so doesn't file for unemployment benefits, or (3) drops out of the labor force; they would not show up in the initial unemployment claims data.

As such, investors should be careful when analyzing the WARN layoff data. As our economists have noted, staffing shortages in the economy will continue to support labor hoarding this year even as economic growth slows.

At the same time, they expect average job gains to bottom in 4Q23/1Q24 at 40k/month and remain below the replacement rate (~90k) through 2024. That type of anemic employment growth would make it easy for an increase in unemployment claims to push payroll growth negative.

And that is why we think bond market investors will become increasingly nervous as we move through the year. **As nervousness grows about negative nonfarm payrolls prints, we think investors will increasingly embrace government bonds**, as we discussed in The Return of Government Bonds.

US banking woes remain

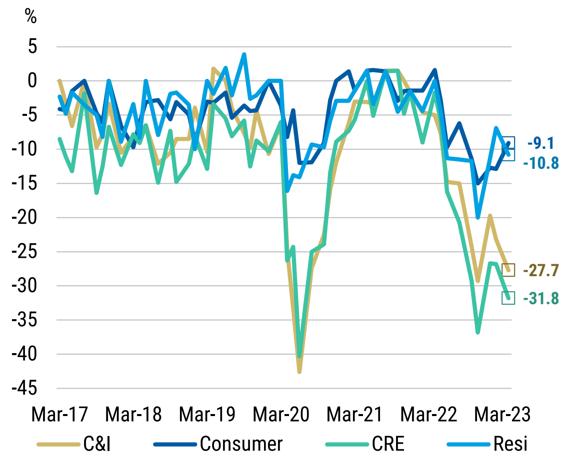
Before the mid-March events in the regional banking sector, lending standards had begun tightening. The Fed should release the next Senior Loan Officer Opinion Survey in early May, which would provide a timely update on how conditions evolved in 1Q23.

The Dallas Fed will also provide an update to its Banking Conditions Survey on May 15, which will cover the period May 2-10. The last survey, covering the period March 21-29, showed a deterioration in credit standards for most loan types (see Exhibit 5).

The National Association of Supervisors of State Banks also release a series of community bank sentiment indexes, the last of which reflects sentiment in 1Q23 (see Exhibit 6). At the time, 94% of community bankers believe the U.S. economy is currently in a recession.

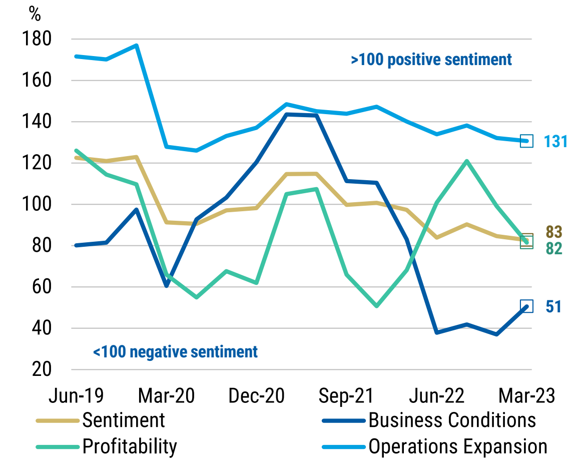
Because some banks responded to the survey after the mid-March bank closing, the association published an update on April 25. In a blog post, the association suggested, "average community banker sentiment dropped from 84 before March 9 to 78 for those bankers who completed the survey during the final three weeks of March."

Exhibit 5: FRB Dallas Banking Conditions Survey: credit standards by loan type



Source: Morgan Stanley Research, FRB Dallas, https://www.dallasfed.org/research/surveys/bcs/data

Exhibit 6: Community Bank Sentiment Indexes



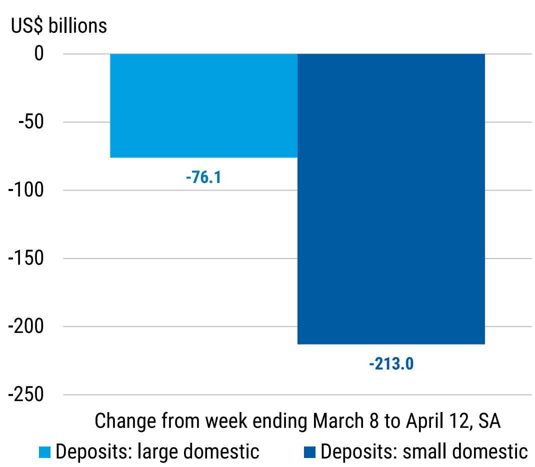
Source: Morgan Stanley Research, National Association of Supervisors of State Banks, https://www.csbs.org/cbindex

Since mid-March, both large and small domestically chartered US banks have lost deposits (see Exhibit 7). Small banks have experienced the most outflows to date. On a seasonally adjusted basis, banking system deposit flows have been more mixed over the recent 3 weeks (see Exhibit 8).

We think it's important to analyze these deposit flows on a seasonally adjusted basis, given the time of year. Tax season in the US usually results in very specific inflows (early, usually before tax day in mid-April) and outflows (late, usually after tax day).

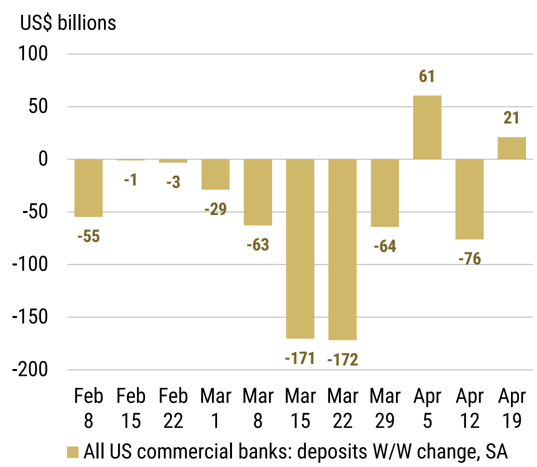
Despite some stability in system-wide deposits, other aspects of bank balance sheets bother us, such as the increasing reliance on borrowings (see Short-Duration Strategy). We think these issues in the banking system and their associated risks to economic activity argue to remain bullish duration in the US, at the very least.

Exhibit 7: Change in deposits for large and small domestically chartered banks from March 8 to April 12



Source: : Morgan Stanley Research, Federal Reserve H.8 report, Bloomberg

Exhibit 8: Weekly change in deposits for all US commercial banks since February 8



Source: : Morgan Stanley Research, Federal Reserve H.8 report, Bloomberg

BoJ Decision Is a Bullish Tailwind for Duration

While markets had seen a reasonable chance that the BoJ would tweak the yield curve control (YCC) framework in the April MPM (with such expectation encouraged by another upside surprise in the Tokyo CPI print early on Friday morning), the BoJ left monetary policy settings unchanged.

At the press conference, BoJ Governor Ueda explained—in declaring his intention to continue with monetary easing—that he was less worried about the risk of inflation continuing to overshoot +2% than the risk of prices starting to fall once again owing to premature policy tightening.

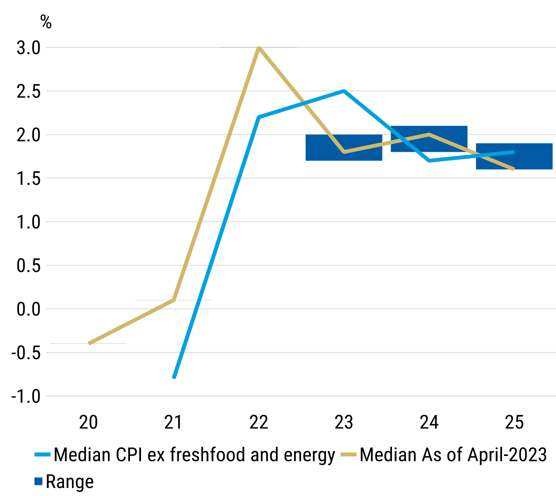
He also suggested that while a majority within the MPC has a decent conviction that inflation will slow down below 2% by late this fiscal year, there is little conviction that inflation will pick up once again beyond FY2024.

Such outlook was expressed in their quarterly Outlook for Economic Activity and Prices update with the initial forecasts for FY2025 coming in below +2% on both a CPI ex fresh food and ex fresh food and energy basis (see Exhibit 9). The BoJ also signaled that it sees risks to prices as skewed to the downside for FY2025.

This should not be surprising given that the output gap remains in negative territory as of now, inflation expectations have basically just been drifting sideways (see Exhibit 10Exhibit 10), and—larger-than-usual spring wage hikes notwithstanding—there is still only minimal evidence of inflation accelerating as a consequence of higher wage costs being passed through to consumers.

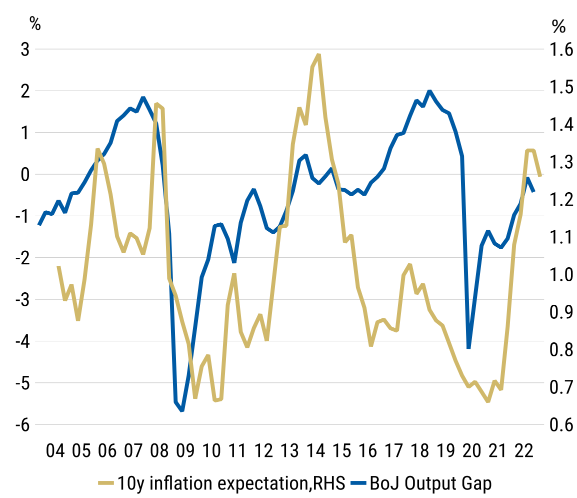
In sum, the BoJ seems to focus more on the sustainability of inflation (driven by a positive output gap, higher inflation expectations and higher wage growth) rather than the magnitude of headline inflation (which is what markets seem mainly concerned about).

Exhibit 9: BoJ new inflation outlook



Source: BoJ, Morgan Stanley Research

Exhibit 10: BoJ output gap and Quick 10y inflation expectations



Source: BoJ, Quick, Morgan Stanley Research

Such an outcome disappointed market participants, and we believe that markets now appear to recognize that the Ueda-led BoJ has no immediate intention of reacting to cost-push inflation (despite its ongoing acceleration).

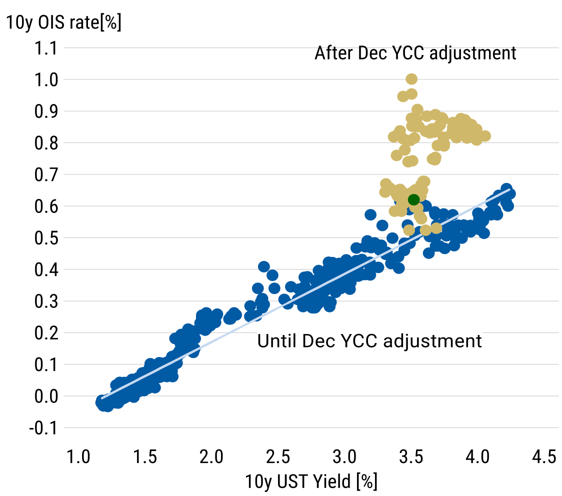
As such, initial post-meeting price action pointed to an unwinding of positioning on the near-term policy adjustment, as we had anticipated in "Gov. Ueda's First MPM: Our BoJ Preview and Implications on the Yen Rate Market".

As we discussed in "Ahead Of The BoJ MPM", the swaps curve had until recently remained priced for some sort of adjustment to the YCC framework (reflecting an expectation that the 10y sector would be sold off under such a scenario) (see Exhibit 11).

But given this week's "as is" decision, we believe that many players may now be reluctant to remain positioned to the short side or under-invested at the cost of incurring negative carry over the seven-week period prior to the next policy meeting.

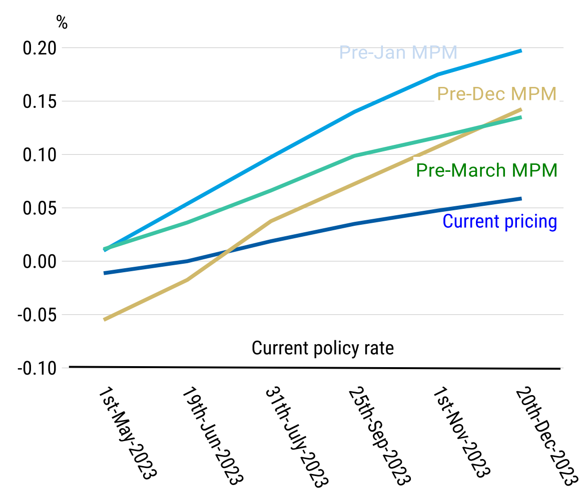
We expect market volatility to decline into long holiday in Japan (assuming that the commencement of a rate hike cycle is still being viewed as unlikely) (see Exhibit 12) and as such we continue to see a good prospect that the (high carry + rolldown) 7y–10y sector will outperform on the swaps curve, and the 15-20y sector on the JGB curve.

Exhibit 11: 10y UST yield vs 10y TONA OIS yield



Source: Morgan Stanley Research, Bloomberg

Exhibit 12: BoJ rate hike path



Source: Morgan Stanley Research

- **Trade idea: Maintain JGB 15s30s steepener**
- **Trade idea: Maintain TONA OIS 10s30s steepener**
- **Trade idea: Maintain long 20y JGB ASW vs ESTR**

Why Hasn't CNY Reacted to Positive News From China?

We have been holding a more constructive view on CNY since early October on the back of the view that China reopening could be faster than the market expectation (see EM Strategy: Asia Macro Strategy: Are We Reaching a Watershed Moment for China? November 1, 2022).

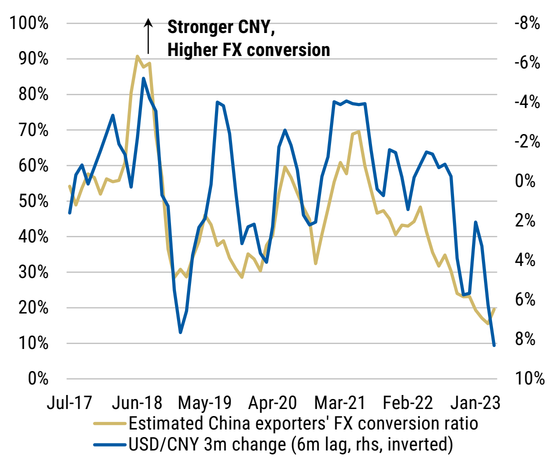
Our thesis was that: 1) The reopening could surprise investors; 2) China growth could improve and beat the market expectation; 3) Equity inflows could pick up; and 4) Exporters could start to increase their FX conversion ratio by selling USD and buying CNY.

CNY appreciation has stalled: The bullish CNY recommendation worked well between October and January. But since then, CNY has been trading sideways and a bit weaker versus USD. This happened despite consistent better-than-expected economic data, especially trade data.

We believe that there are a number of factors which explain why CNY is not outperforming:

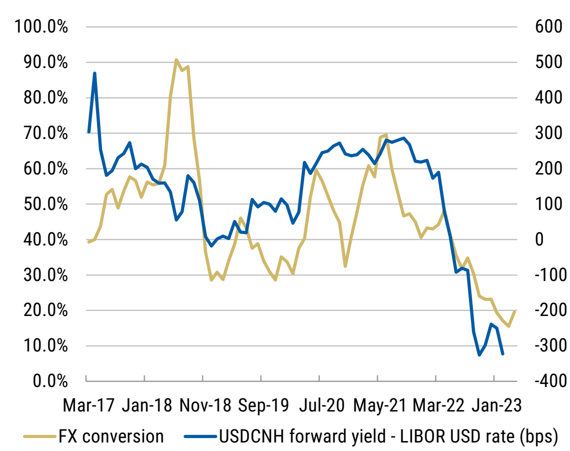
1. **Data quality:** Despite the economic data being better than expected, investors have expressed some doubts about the quality of the data.
2. **Weak sentiment:** Growth data have been better but sentiment on the ground in mainland China is not great.
3. **Equity outflows:** China has seen net equity outflows of US$12 billion since late February.
4. **Exporters not converting:** Exporters' FX conversion ratio remains low at around 15%.

Exhibit 13: Exporters' FX conversion is low



Source: Bloomberg, SAFE, Morgan Stanley Research

Exhibit 14: US-China rate differential still in favour of exporters holding USD



Source: Bloomberg, SAFE, Morgan Stanley Research

We believe that there are a few factors which could weigh on CNY in the next few months:

- **The trade surplus could decline:** We think that the risk of a lower trade surplus is increasing into 2H with better domestic demand and lower exports due to recession risk in the western world. The recent State Council Notice to boost exports also suggests that the authorities are concerned about that.

- **Outbound tourism could increase:** The services deficit used to be US$240 billion a year before the pandemic and has come down to less than US$100 billion in 2022. With increasing flight capacity, there should be more outbound Chinese tourists in 2H.

- **Capital outflows could increase a bit:** With more Chinese people overseas, there could be some capital outflows via errors and omissions as well. Errors and omissions are the hidden outflows. The number was about US$200 billion before the pandemic and was US$91 billion in 2022.

- **The PBOC might be ok with some CNY underperformance:** With a possible weakening balance of payments, the PBOC could tolerate more fundamental-driven CNY underperformance. This would be in line with its long-term policy since 2015.

- **One silver lining is that capital outflows would be limited in 2023:** Bond outflows were the main driver of CNY weakness in 2023. However, as we pointed out in China's Capital Flows: Resetting and Stress Testing, November 8, 2022, most of the active managers who wanted to leave the Chinese bond market are already out.

Overall, we bring forward our medium-term cautious view on CNY given the factors described above. We close our short SGD/CNH recommendation. Instead, we believe that CNY could be a good funding currency. We recommend short CNH/THB, targeting 4.75 with a stop at 5.00 (see more detailed analysis in CNY | Why hasn't CNY reacted to positive news from China?).

Our Current Stance On Markets

In global rates markets, we enter long Feb 44 iota. We maintain long 2-month T-bill vs. OIS, long 5y UST, long 10y BE vs. 2y UST, 2s30s steepeners, and 5s30s steepeners.

In the euro area, we close short Bobl ASW and buy SPGB Jan 28 vs. SPGB May 25 and SPGB Apr 33. We enter buy Jun 136/137.5 Bund call spread and receive Sep 23 ECB vs. July 23 ECB. We maintain receive EUR 10y10y swap, buy OATei 31, and receive EUR 30s50s swap. We continue to recommend conditional 6m forward 2s10s swap flatteners through OTM receivers, July 95.625/95.875/96.125 Euribor put fly, buy OAT Nov 32 vs. Bund Aug 32, Schatz/Bund ASW box, and long 20y OAT vs. 5y and 50y.

In the UK, we close pay 2y SONIA. We enter receive Jun 23 – Aug 23 MPC spread. We maintain long IL28.

In Japan, we maintain JGB 15s30s steepener, JPY 10s30s steepener, and long 20y JGB ASW vs. ESTR compound.

In the dollar bloc, we maintain receive Aug RBNZ vs. pay Aug RBA.

In foreign exchange markets, we enter short CNH/THB (target: 4.75, stop: 5.00). We maintain short EUR/USD (target: 1.03, stop: 1.1350), short AUD/USD (target: 0.62, stop: 0.70), short USD/JPY (target: 120.0, stop: 137.0), long USD/CAD (target: 1.3850, stop: 1.32), and long EUR/GBP (target: 0.93, stop: 0.84).

Interest Rate Strategy

United States

Will markets feel confident about a May hike? As of writing on late Friday afternoon, a Bloomberg report suggests that the FDIC has decided to bring another regional bank under its receivership program. Markets remain complacent and unprepared for another round of bank stresses manifesting in a non-linear fashion. While only 3 days away from the next FOMC meeting, the latest news reports could make the market question assuming a 25bp hike at the May meeting.

Quantifiable metrics suggest banking system deterioration continues: Money market funds keep receiving inflows, the takeup at the FHLBs and the Fed's cash facilities remain elevated and ticked up, and stock prices of regional banks stay pressured, suggesting weakness in regional banks remains.

"Blink and miss it" steepeners over grinding flatteners: The gingerly repricing of a 25bp May hike in the last month suggests any flattening will be slow, while events of mid-March remind us that steepeners can work very quickly. We prefer long duration and steepeners for this option-like payout; we continue to suggest 2s30s steepeners, 5s30s steepeners, long 5y UST, and long 10y breakevens vs. long 2y.

FOMC preview – room for dovish interpretation: Consensus economist expectations have revised growth lower, with inflation being stickier – a sentiment likely shared by markets – which differs from the Fed's perception that both growth and inflation could decrease if a credit crunch was to materialize. This highlights a potential gap between the market's and the Fed's thinking, and opens the door for the market to be surprised by the Fed's message in a dovish way.

Treasury refunding preview: We expect the US Treasury to leave coupon sizes unchanged at the next meeting. However, we see risk for larger coupon auction sizes in the second half of 2023 to maintain the bill share of total debt within the recommended 15-20% range. On buybacks, we note that buyback size flexibility in times of market stress can improve market liquidity, even if the size is smaller than LSAPs. We continue to view buybacks as a backstop to be implemented only if market conditions warrant down the road – and think final implementation, if it happens, will take time.

Euro area

With the return of the risk-off mode at the start of the week, Bund yields failed to return to the 2.60% levels at which we expected to add back the structural long EUR duration. Given the long list of tailwinds for 2H23, we decided to reenter the long EUR duration through the EUR 10y10y swap on Wednesday. The prospect of a higher volatility on risky assets and rates in 2H23 and the underperformance of the EUR 10y10y swap versus 5y5y makes the 10y10y more attractive, in our view. We are also adding a June 136/137.5 call spread to position for a return towards

2.20% on the Bund by late May and receive September ECB versus July ECB.

On the curve, we still think that the 2s10s slope could flatten back near term. We keep our EUR 30s50s swap, our conditional 6mth forward 2s10s flatteners and our OAT 5s20s50s fly (long 20y). We look to pay 10y in the EUR 5s10s30s swap fly on a 10y rally as another long volatility trade for 2H23. On ASW, we preferred closing the short Bobl ASW given the current renewed uncertainty. Moreover, the gap to fair value is too low to justify keeping shorts. In cash, while 10y OATs remain cheap, 5y SPGB has finally normalised on the curve. We keep our long OAT Nov 32 versus Bund Aug 32 and close our long SPGB 2s5s10s fly.

United Kingdom

In the UK, we turn neutral on UK duration and close our paid 2Y SONIA position. UK front-end rates have underperformed cross-market over recent weeks and we believe current levels are getting attractive for global investors. In addition, we were expecting a more pronounced focus from BoE speakers on the risk of sticky inflation but this did not materialise, reducing the probability of additional hikes priced in whites and reds. Furthermore, positioning in front-end rates is now cleaner reducing the potential for higher rates, while little DV01 will be issued in the coming week. In money markets we enter into a Rec Jun'23-Aug'23 MPC spread; the UK terminal rate is close to the highs of this hiking-cycle and we see limited probability for the front-end of the MPC curve to price in more hikes. Moreover, we find the current Jun'23-Aug'23 MPC spread at an attractive level to receive, while reducing the trade volatility compared to outright positions.

Japan

We maintain our bullish view on JPY duration, and continue to prefer the high carry+rolldown sector (7-10y on TONA OIS rate, and 15-20y on JGB yield) with market volatility expected to decline into the long holiday in Japan. The BoJ maintained the status quo in its meeting this week, and BoJ Governor Ueda communicated the importance of the sustainability of inflation beyond the short term. He explained that he was less worried about the risk of inflation continuing to overshoot +2% than the risk of prices starting to fall once again at some point in the future, thereby suggesting that the BoJ intends to maintain monetary easing.

Markets now appear to recognize that the Ueda-led BoJ has no immediate intention of reacting to cost-push inflation (even though it is accelerating now), and initial post-meeting price action pointed to at least somewhat of an unwinding of positioning on the near-term policy adjustment. We believe that many players may now be reluctant to remain positioned to the short side at the cost of incurring negative carry over the seven-week period prior to the next policy meeting. We maintain JGB 15s30s steepener, TONA OIS 10s30s steepener, and long 20y JGB ASW vs ESTR.

We also discuss the major lifers' investment plans for 1HFY2023. There still appears to be quite a strong preference for domestic bonds from a relative yield perspective. However, most signaled that they expect the BoJ's "yield curve control" (YCC) to be either further adjusted or scrapped in June or soon thereafter, thereby anticipating modestly higher JGB yields into fiscal year-end.

Such view might have changed post the April MPM, given Ueda's dovish remarks, but we believe that lifers would likely be reluctant to chase the long-end JGB yield lower at the early stage of new fiscal year. In any case, the favored strategy appears to be one of lifers starting out slowly and then increasing their super-long JGB purchases once yields (presumably) move higher . This should support our currently recommended 15s30s and 10s30s steepener trades.

United States | Bank stresses in focus again

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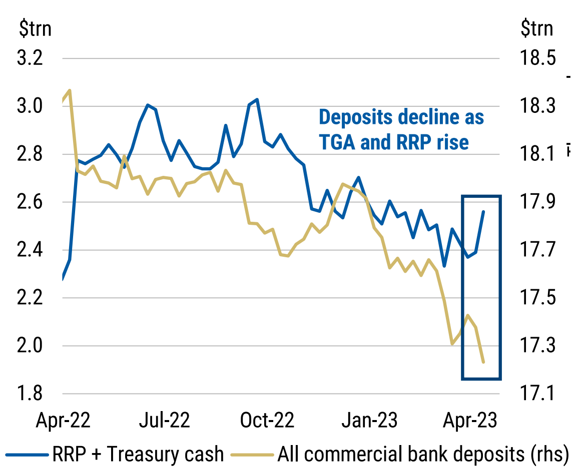
	Duration	Curve	Inflation
VIEW	**BULLISH**	**STEEPENING BIAS**	**BULLISH MEDIUM TERM INFLATION**
Remarks	Banking system concerns persist, weaker growth data, flexible Fed	Continued banking concerns, possibility of cuts, with long-term inflation concerns	Markets underestimate inflation persistence; dovish Fed
Trades	Long 5y UST	2s30s steepeners 5s30s steepeners	Long 10y BE vs. 2y Long 20y TIPS iota

Bank stresses are back in the headlines

As of writing on late Friday afternoon, a Bloomberg report suggests that the FDIC has decided to bring another regional bank under its receivership program. While the report as of writing was not confirmed, such headlines would likely exacerbate the deposit flight and money market inflows we have seen over the last few weeks.

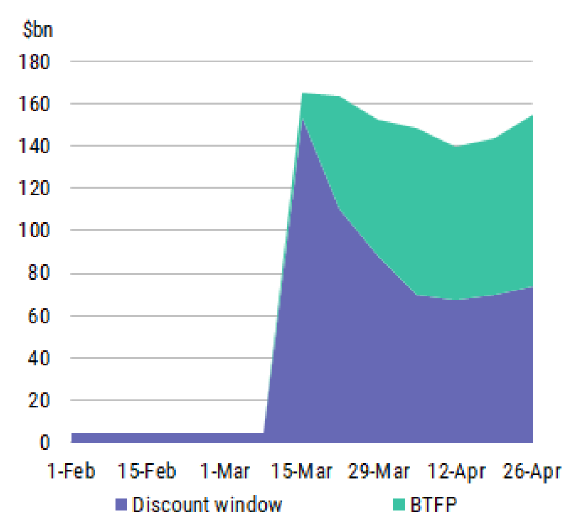
We have been flagging that markets remain complacent and unprepared for another round of bank stresses manifesting in a non-linear fashion. While only 3 days away from the next FOMC meeting, **the latest news reports could make the market question assuming a 25bp hike at the May meeting.**

Exhibit 15: Commercial bank deposits vs. Treasury cash balance and RRP outstanding



Source: Bloomberg, Morgan Stanley Research

Exhibit 16: Total take-up at the Fed's discount window and the BTFP facility in the last 3 months



Source: Bloomberg, Fed, Morgan Stanley Research

The latest data from the Fed's weekly H.8 report, which shows a decline in deposits and cash as tax payments go out from banks to the Treasury's account and into RRP via money market funds (see Exhibit 15). However, the total deposit outflows from banks (and MMF inflows) have outpaced deposit outflows in 2022, suggesting banks have been facing deposit outflows, even before Friday's banking news.

The continued margin weakening of the banking system is mirrored in the take-up of FHLB discount notes by banks to shore up cash, as well as the take-up at the Fed's discount window and BTFP facilities, which have now collectively ticked up for two consecutive weeks (see Exhibit 16).

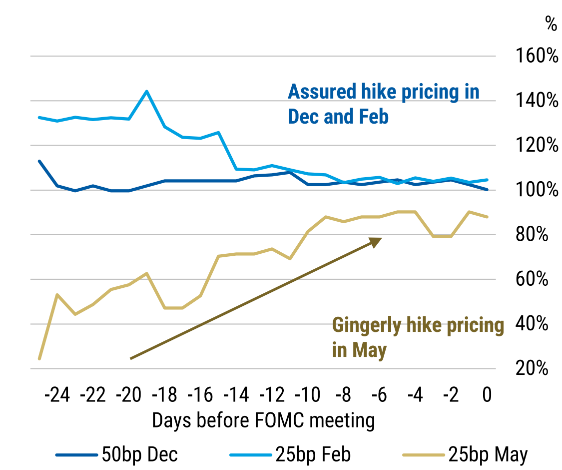
We think long duration and steepeners remain well positioned to capture the non-linear risks emanating from bank stresses, and we continue to suggest 2s30s steepeners, 5s30s steepeners, long 5y USTs, and long 10y breakevens vs. long 2s.

"Blink and miss it" steepeners vs. grinding flatteners

US rates markets have gradually moved closer to fully pricing in a 25bp hike at the May meeting, after being unsure of banking system stresses and their effect on the economy (see Exhibit 17). This is in sharp contrast to the pricing of a 50bp hike in December 2022 and 25bp in February, where the market had settled around the expected Fed action well in advance of the actual meeting (we exclude 25bp in March given extreme volatility leading up to it).

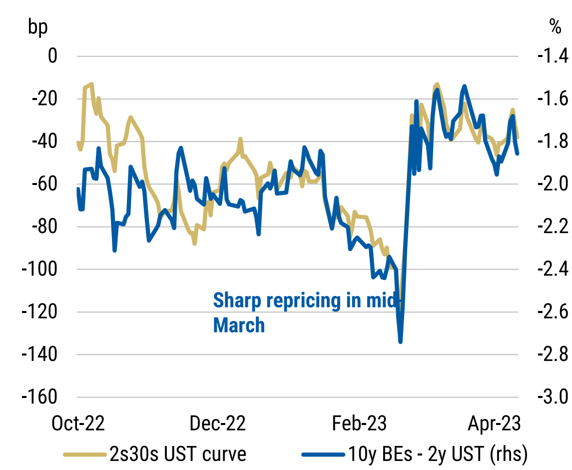
We think this gingerly pricing will become a feature of interest rates markets, at least through the June FOMC meeting, as markets question banking stresses (which aren't resolved yet, see Exhibit 19and Exhibit 20). Our economists expect the Fed to deliver the last hike of this cycle in May, and then signal a pause, unless both the data remain strong and the banking stresses remain contained.

Exhibit 17: Probability of the outcome at the December, February, and May FOMC meetings



Source: Bloomberg, Morgan Stanley Research

Exhibit 18: 2s30s steepeners and 10y BEs vs. 2y in the last six months



Source: Bloomberg, Morgan Stanley Research

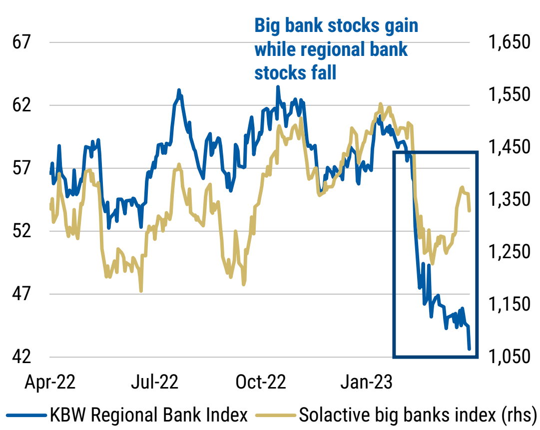
A slow pricing of any future interest rate hikes beyond May should give investors time to adjust their positions if markets drift in the direction of even higher terminal rates or a longer hold at higher rates. On the other hand, as we saw in early March (see Exhibit 18), a steepening of the curve driven by further banking system issues could be a rather rapid event (see Exhibit 17). **We think the asymmetry of the speed of flattening (slow) vs. steepening (rapid) remains an attractive feature for staying in steepeners.**

May FOMC preview: To hold or not to hold

The May FOMC meeting comes amid a challenging backdrop for the Fed, where both financial stability and inflation risks factor into the Fed's assessment of monetary policy. Based on backward-looking inflation metrics alone, investors would have expected a hawkish tone at the upcoming meeting, yet the recent tightening of credit conditions, emergence of bank stresses, and high uncertainty are likely to keep the Fed cautious about projecting a hawkish path for policy ahead.

Our economists expect the Fed to hike by 25bp at the May FOMC meeting, and signal that the Fed would look to pause for some time to assess the impact of hikes. To that end, our economists expect key language changes in the FOMC statement which will preserve the optionality for adjusting the rate path, with two-sided risks (both hikes or cuts), and we think that such language, while it doesn't preclude further hikes, could keep the downward slope of the rates market intact.

Exhibit 19: Regional bank versus big bank stock indices in the last year



Source: Bloomberg, Morgan Stanley Research

Exhibit 20: MMF inflows in the last year

Source: Crane data, Morgan Stanley Research

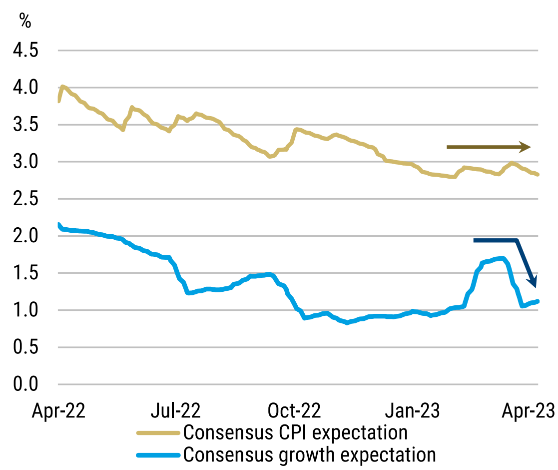
Re-emergence of bank stresses will likely weigh on markets. As we have noted in recent weeks, to the extent bank stresses are the key macro issue occupying markets right now, it is notable that regional bank stock indices have weakened over the last few days (see Exhibit 19) as deposit flight concerns have remained, and money market funds have continuously received inflows (see Exhibit 20).

Besides bank stresses muddying the near-term outlook for financial stability, there are also questions about how quickly and how much will tighter credit conditions affect growth and inflation going forward. To that end, it is noticeable that the consensus 1y ahead growth expectations have corrected lower in the last month, while 1y ahead inflation expectations have remained sticky (see Exhibit 21).

And this change in the consensus path for lower growth but stickier inflation – likely shared by markets – differs from the Fed's perception that both growth and inflation could decrease if a credit crunch was to materialize (see grey box). This highlights a potential gap between the market's and the Fed's thinking, and opens to door for the market to be surprised by the Fed's message in a dovish way.

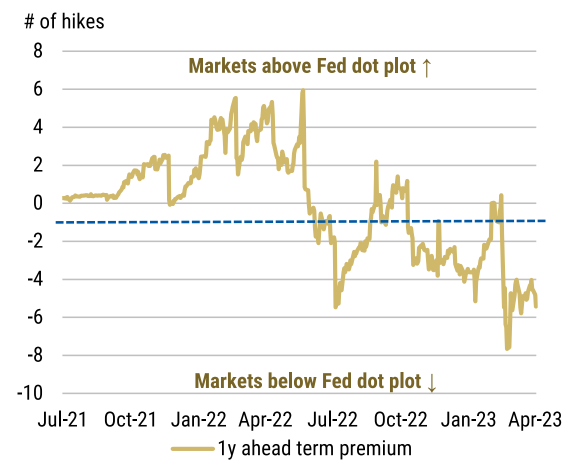
> ***Powell at the March FOMC meeting:*** *There's a great deal of literature on the connection between tighter credit conditions, economic activity, hiring, and inflation. Very large body of literature. The question is, how significant will this credit tightening be and how sustainable it will be?*

Exhibit 21: Change in the 1y ahead consensus growth and inflation expectations



Source: Bloomberg, Morgan Stanley Research

Exhibit 22: Market price 1y ahead versus Fed's dot plot



Source: Bloomberg, Morgan Stanley Research

One benchmark that will remain relevant heading into the FOMC meeting will be a comparison of the rates market with the dot plot. The March dot plot (where Powell could provide a verbal update at the May meeting) suggested a terminal rate at 5.125%. Comparing to that dot plot, market-implied rates currently undershoot the Fed's dot plot, which represents a type of negative term premium in the market. However, we think that such a negative term premium/downward slope in the market-implied Fed path is likely to persist especially as the risk of a nonlinear escalation of banks stresses should weigh on the market's mind.

Overall, we see scope for market to extract a dovish message from the Fed at the upcoming FOMC meeting, especially after news of a possible building of banking system stress in recent days: We continue to suggest investors play curve steepeners and long duration expressions with tight stops – 2s30s and 5s30s steepeners with stops at -50bp and -15bp. We stay long 5y USTs outright, with a stop at 3.75%. We continue to suggest long 10y breakevens with long 2y.

Treasury May Refunding Preview

This upcoming Treasury refunding announcement on May 3 – the same day as the May FOMC meeting – comes amid a period of uncertainty with respect to projecting US government financing, in light of fluid debt ceiling developments.

Accounting for the increase in the TGA cash balance from mid-April tax receipts and with the upcoming June 5 deadline for the "debt issuance suspension period," we look forward to updates from Treasury on its debt ceiling time line. In February, the Congressional Budget Office projected the government's ability to borrow using extraordinary measures would be exhausted between July – September (i.e., "red zone"). Our preliminary "x-date" forecast is early August (see United States | The show is not over yet for more) and our Public Policy team does not expect the debt ceiling to be resolved "until the eve of the x-date."

Given the various moving parts to this equation (not to mention the legislative aspect), **we expect Treasury to keep all coupon auction sizes unchanged at May refunding**.

With the Fed's QT program tracking right on schedule through the end of 1Q23, we think the US Treasury will need to fund an additional $720bn and $360bn from the private market in 2023 and in 2024, respectively. We then expect Fed balance sheet run-off to conclude in 2Q24. In our view, the bulk of the additional issuance as a result of QT will be funded by **increased T-bill issuance, back-loaded in 2H23 after the expected debt ceiling resolution**. Minutes from the Treasury Borrowing Advisory Committee (TBAC) meeting in February noted there is "there is ample scope to increase bill supply."

Exhibit 23: Overall financing and issuance figures, CY2022 - CY2025 $bn)

Calendar year	2022	2023	2024	2025
KEY FINANCING FIGURES				
Budget Financing Needs	1357	1463	1633	1741
Cash Balance Increase	41	253	0	0
Fed B/S Rolloff from Coupons	294	646	312	0
Fed B/S Rolloff from T-bills	36	74	48	0
Net Borrowing Need	1398	1716	1633	1741
OVERALL ISSUANCE FIGURES				
Gross Issuance of Coupons, TIPs, and FRNs (ex Fed reinvestments)	3437	3163	3163	3163
Maturities of Coupons, TIPs, and FRNs (ex Fed reinvestments)	2150	2926	2771	2511
Net Coupons, TIPs, and FRN Issuance	1287	237	392	652
Net T-bills (residual) (ex Fed)	110	1479	1241	1088
Net Borrowing	1398	1716	1633	1741
PRIVATE ISSUANCE FIGURES				
Fed secondary market purchases of Coupons	75	0	0	0
Fed secondary market purchases of T-Bills	0	0	0	0
Net Coupon, TIPs, and FRN Supply to Private Market	1506	883	704	652
Net T-Bill Supply to Private Market	146	1553	1289	1088

Source: US Treasury, Morgan Stanley Research estimates

At May refunding, **we expect Treasury to keep all coupon auction sizes unchanged**. Stable coupon issuance likely provides Treasury with more flexibility as it manages up against the debt limit, amid the "greater-than-normal variability in benchmark bill issuance and significant usage of CMBS."

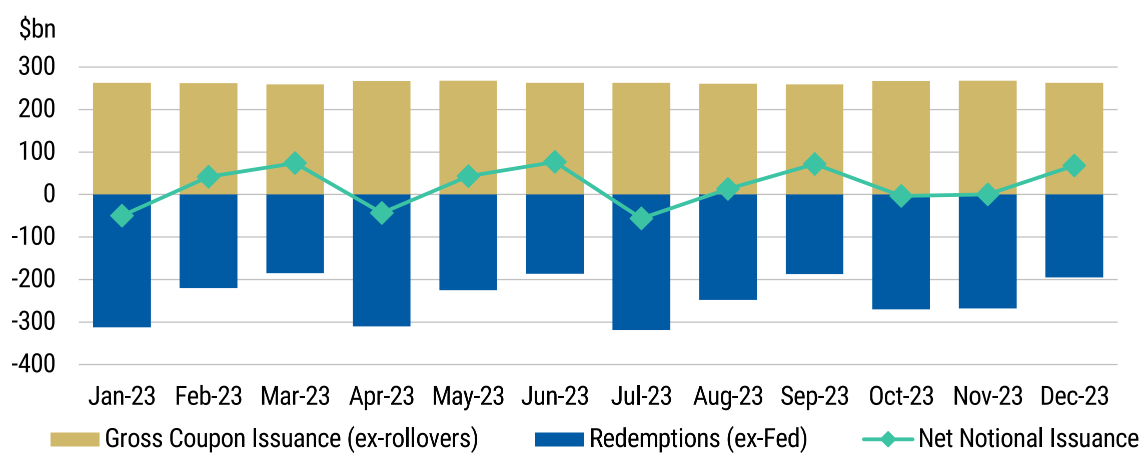
Exhibit 24: Gross auction size estimates by tenor and month ($bn)

Month	2y	3y	5y	7y	10y	20y	30y	5T	10T	30T	FRN	Total
Jan-23	42	40	43	35	32	12	18	0	17	0	24	263
Feb-23	42	40	43	35	35	15	21	0	0	9	22	262
Mar-23	42	40	43	35	32	12	18	0	15	0	22	259
Apr-23	42	40	43	35	32	12	18	21	0	0	24	267
May-23	42	40	43	35	35	15	21	0	15	0	22	268
Jun-23	42	40	43	35	32	12	18	19	0	0	22	263
Jul-23	42	40	43	35	32	12	18	0	17	0	24	263
Aug-23	42	40	43	35	35	15	21	0	0	8	22	261
Sep-23	42	40	43	35	32	12	18	0	15	0	22	259
Oct-23	42	40	43	35	32	12	18	21	0	0	24	267
Nov-23	42	40	43	35	35	15	21	0	15	0	22	268
Dec-23	42	40	43	35	32	12	18	19	0	0	22	263

Source: US Treasury, Morgan Stanley Research estimates

As it relates to the trajectory of coupon issuance after May refunding, **we see risk for larger coupon auction sizes**. Net notional issuance for coupons is projected to decrease in the May – July quarter, from the February – April quarter. The decline in net coupon issuance is especially pronounced in comparison to full-year 2022 issuance relative to a hypothetically stable path of coupon issuance throughout 2023.

Exhibit 25: Projected Treasury coupon supply in 2023



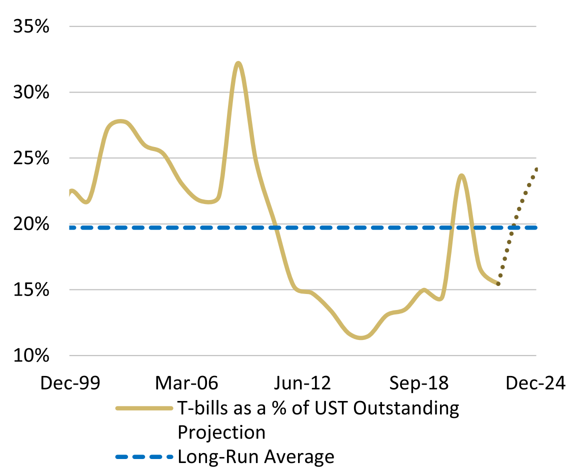
Source: US Treasury, Morgan Stanley Research estimates

Below, we show how quickly T-bills as a percentage of UST debt rises in a scenario with a stable path of coupon issuance throughout 2023. In this scenario, T-bills as a percentage of UST is projected to rise a bit above the upper-end of the 15-20% recommended by the end of 2023.

In fact, TBAC noted in February that it **may be appropriate to consider increases to nominal coupon auction sizes in future quarters** with the rationale to "maintain bill share of total debt within the recommended 15-20% range," seemingly in anticipation of outsized T-bill supply.

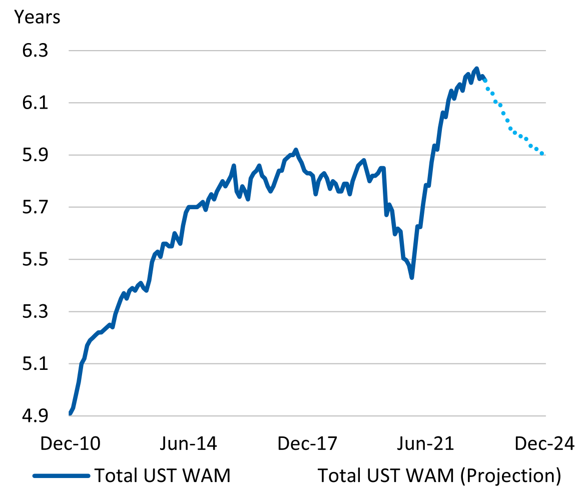
Increases to coupon auction sizes also allow the US Treasury weighted average maturity of outstanding debt to remain above pre-Covid levels. In a scenario where coupon auction sizes are unchanged through the end of 2024, we project the US Treasury weighted averaged maturity of outstanding debt to return near pre-Covid levels by the end of 2024.

Exhibit 26: T-bills as a % of UST debt



Source: US Treasury, Morgan Stanley Research estimates

Exhibit 27: UST WAM projection



Source: US Treasury, Morgan Stanley Research estimates

Since August 2022 refunding, Treasury has continued to gather information about the benefits and costs of a potential buyback program (for more, see Treasury Buybacks, Under Further Review). The 1Q23 TBAC Charge from February refunding showed an extensive analysis on a possible framework for a regular and predictable buyback program, with the main benefits to improve Treasury market liquidity and for cash management purposes. Although Treasury has not made a decision on whether or how to implement a buyback program, the latest primary dealer questionnaire sought feedback on the size and possible tenors of a buyback program.

In the last Treasury buyback operation from March 2000 – April 2002, buybacks amounted to a total of $67.5bn. Positive effects from a buyback program could likely be achieved in a smaller size than past QE episodes, provided they have flexibility for larger amounts in times of market stress or dealer capacity constraints. We believe buybacks up to $25bn per month are an amount likely to compress illiquidity premia in more aged issues while still being digestible by the market.

We continue to view buybacks as a backstop to be implemented only if market conditions warrant down the road. Treasury guidance has suggested it will provide "ample notice" on any decisions and even an eventual implementation of buybacks is still likely to take some time.

Trade idea: Maintain add long 10y breakevens vs. long 2y UST at -168bp
Trade idea: Maintain 2s30s steepeners at -28bp
Trade idea: Maintain 5s30s steepeners at 18bp
Trade idea: Maintain long 5y UST at 3.47%

Euro area | Piling into structural long-duration trades

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Exhibit 28: Summary of our EUR views

1-month horizon	Duration	Curve	Inflation	ASW	EGB spreads
Macro	Neutral	Flatter	Lower	Tighter	Stable/Lower
Net supply after QE	Negative	Steepeners 2s10s			
Valuation	Bund LT FV at 2.50%	EUR 10s30s swap 6bp too flat	EUR 5y5y swap 21bp rich	Bobl ASW 3bp rich	OAT 2s5s10 fly 5bp cheap
Seasonality	No pattern before June	May: BTP 5s10s flattening from d15 - 69%		May: OAT ASW widening from d11 - 75%	
Technical analysis	Weekly stochastics now oversold				
Market positioning	Short the 4 German contracts	10s30s steepeners	Long short-end	short Bobl ASW	Short BTP
Preferred trades	**Rec EUR 10y10y swap**	Rec EUR 30s50s swap	Long OATei 31	**Closed short Bobl ASW**	**Close Bono 2s5s10s fly (long 5y)**
	Buy June 136/137.5 Bund call spread	6m fwd EUR 2s10s cond. flatteners		Short Schatz ASW vs Bund ASW	Long OAT Nov 32 vs Bund Aug 32
	Rec Sep 23 ECB vs July 23 ECB				
	Long July 95.625/95.875/96.125 Euribor Put fly	Long OAT 20y vs 5y and 50y			
Our view	**Bullish**	**Richer 50y swap**	**Stable/higher**	**Stable to wider German ASW**	**Stable**

Source: Morgan Stanley Research

Duration

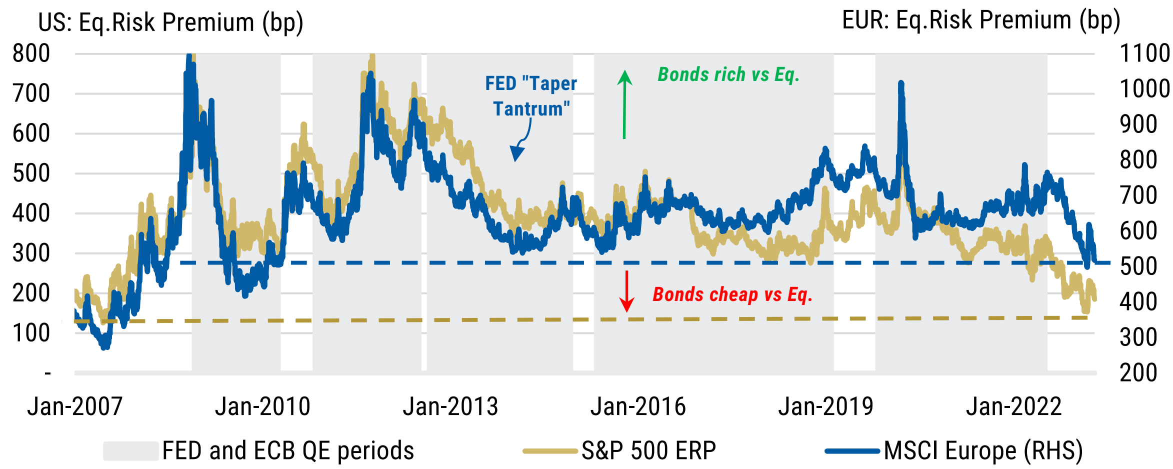
While we were expecting another selloff, to 2.60%, ahead of the ECB meeting, the return of the risk-off mode fuelled an earlier rally, reflecting a shift in investor focus back to financials, as concerns about the banking system have arisen again following some earning releases. Besides, the Belgian, German and Spanish preliminary CPI numbers were pretty reassuring.

Although **the risk of the ECB delivering a 50bp hike or being hawkish in its messaging or press conference remains, we believe any setback in duration should be limited** for a plethora of reasons, which led us to recommend reentering long-duration trades in European Rates: Time to Reenter Long EUR Duration earlier this week. Catalysts include (for more details see full report):

- **A major repricing versus macro data:** 10-year Bund yields reached our 2.50% target level last week fully correcting their 45bp premium observed on March 24. Additionally, our expected lower path on eurozone headline HICP and the end of the ECB depo tightening this summer should lead to Bund fair value falling towards 2% by year end.

- **Core EGBs cheap again versus risky assets:** The valuation versus equities using the equity risk premium approach (MSCI Europe and S&P 500) is very close to early March levels and mid-2010 lows for MSCI Europe, i.e., bonds cheap versus equities.

Exhibit 29: Core EGBs cheap again versus MSCI Europe



Source: Morgan Stanley Research

Looking at the behaviour of Bund yields over 6 to 12 months (see Exhibit 30), we found a low MSCI Europe ERP was followed by an asymmetric move on Bund yields, i.e., a rally 80% and 100% of the time over a nine- and 12-month horizon respectively.

Exhibit 30: Low MSCI Europe ERP implies a high probability of EUR duration rally after six months

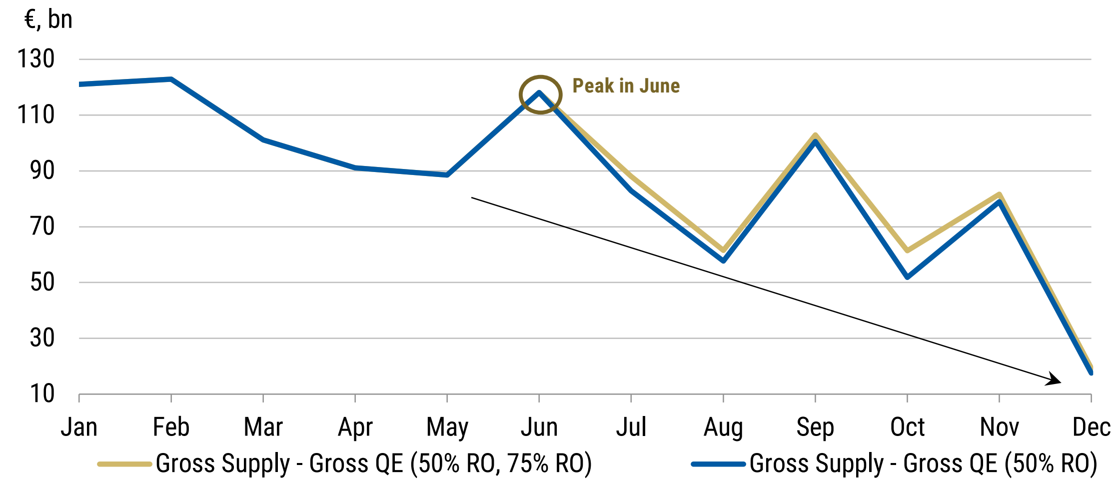
Years	MSCI Europe ERP (1m MA)	Start date	End date	Length	6m Bund perf (bp)	9m Bund perf (bp)	12m Bund perf (bp)
2015	595	23/02/2015	30/12/2015	310	34	10	-14
2013-14	597	05/09/2013	30/07/2014	328	-50	-64	-96
2011	595	26/01/2011	03/05/2011	97	-73	-136	-120
2009-2010	589	04/05/2009	03/05/2010	364	10	-1	-38
2008	489	15/01/2008	29/08/2008	227	61	-22	-79
Average	***573***				***-3***	***-42***	***-69***
Median	***595***				***10***	***-22***	***-79***
Hit Ratio					***40%***	***80%***	***100%***

Source: Morgan Stanley Research

- **Global housing market reversal:** Another worrying signal we have highlighted in the past, which supports EUR duration over the medium term, comes from the housing market. Not only have we had deterioration in the NAHB housing market survey since late 2021 – something that has historically preceded US recessions and Fed easing cycles – but house prices at a global level also peaked in 1H22 and have headed south. We believe that a continuation of these bearish dynamics on house prices could have a negative impact on consumption, which could lead some real money investors to gradually increase their EUR duration exposure.

- **Supply dynamics and seasonality:** After a rise in June, close to February's high, gross supply minus gross QE could decline markedly in 2H23 with the usual August and December troughs (Exhibit 31). Here, we looked at the scenarios of a 50% and a 75% roll-off on APP for 2H23. Seasonality should also become supportive as Bunds, like gilts or USTs, tended to rally 88% of the time for roughly five weeks from mid-June in the 2007-2022 period (see Investigating Rates Seasonality Patterns – 2023 Update).

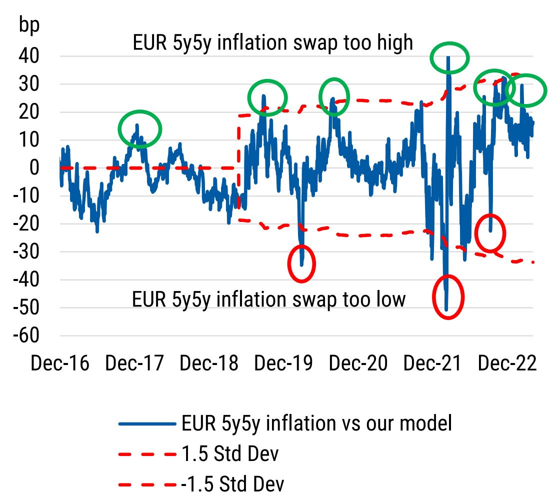
Exhibit 31: Gross EGB supply – gross QE*: Peak in June before sharp drop in 2H23



Source: Morgan Stanley Research estimates; *We assumed both a 50% roll-off until YE and a 75% roll-off for 2H23.

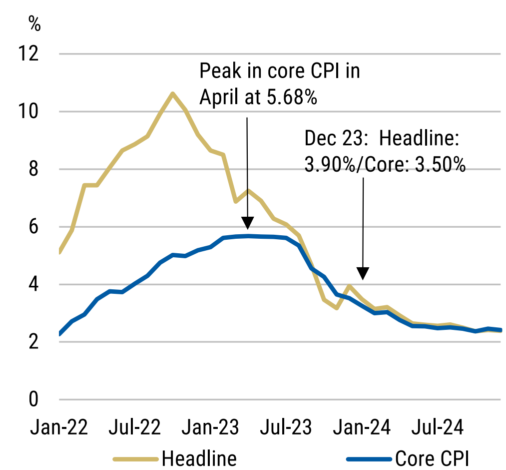
- **A repricing of the inflation premium:** We believe that once eurozone core CPI edges lower in 2H23 (see Exhibit 33), the 21bp premium versus our EUR forward inflation swap model should disappear, and we could even have inflation swap trading with a discount as in May 2022 (see Exhibit 32). A repricing of that premium in 2H23 should be consistent with lower nominal yields, in our view.

Exhibit 32: EUR 5y5y inflation swap still trading with a premium



Source: Morgan Stanley Research estimates

Exhibit 33: Morgan Stanley expected path on headline and core eurozone inflation



Source: Morgan Stanley Research estimates

- **Positioning**: The cumulative net positioning of final investors on 2-year to 30-year German futures moved from flat in mid-March to -€12m on Tuesday, April 25. While it is not a key factor for the 2H23 outlook on EUR long-term rates, the major adjustment in net positioning increases the risk of a short squeeze, as observed this week.

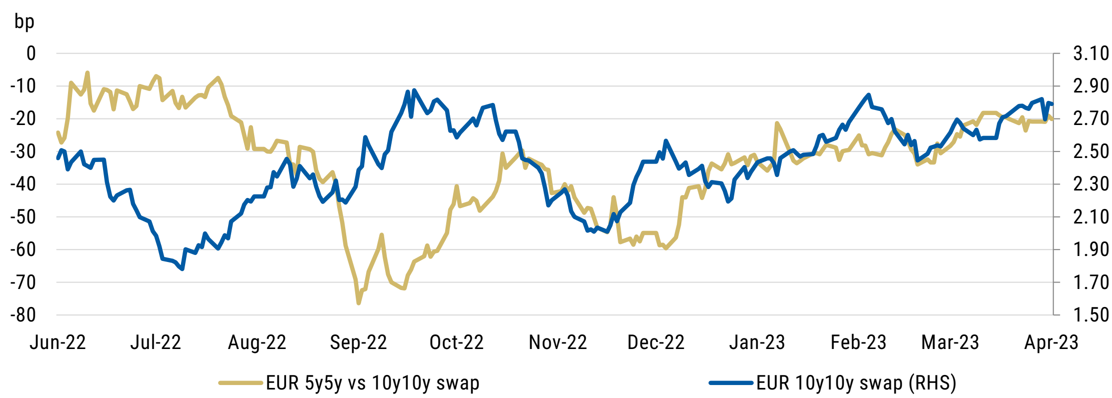
- **On the demand side, Japanese investors seem to be back after a relatively tough year for EGBs, USTs and gilts:** In 2022, Japanese investors' net selling flows reached extremes; however, since the beginning of the year, the trend started to reverse and cumulative net flows in January and February were positive for Bunds, USTs and gilts. Our economists see core inflation starting to subside this summer and forecast the last ECB hike in July, thus Japanese investors could continue to reallocate into Bunds.

Following all those medium-term supportive factors and the stronger price action on Tuesday, we decided to reenter the structural long EUR duration trade through the EUR 10y10y swap. We prefer it to the EUR 5y5y swap mainly for two reasons:

- first, the yield differential tightened by 50bp since early October (see Exhibit 34)

- second, the prospect of higher equity and rates volatility in 2H23 on weaker activity data would likely mean a renewed outperformance of the 10y10y versus 5y5y (the fair value of our EUR 5s10s30s swap fly increases with a rise in volatility series.

Exhibit 34: EUR 10y10y has cheapened dramatically relative to EUR 5y5y and is back to 2022 highs



Source: Morgan Stanley Research

For investors not doing a EUR forward swap, we think the setback on Bund yields of the past couple of days offers the opportunity to investors to buy a June 136/137.5 call spread with a ratio of 3.5 in terms of maximum profit versus maximum loss at the expiry in four weeks. The risk for the position being a 10y Bund yield still stuck around 2.50% by late May.

- **Trade idea: Enter a June 136/137.50 Bund call spread.**
- **Trade idea: Maintain EUR 10y10y swap receiving trade.**
- **Trade idea: Maintain July 23 95.625/95.875/96.125 Euribor put fly hedge.**

ASW: A poor risk-reward for shorts

The combined paying flows from bank ALMs and the renewed risk-off mode this week fuelled an unexpected rewidening of the German ASW. As we stressed in our Idea note European Rates: Time to Re-enter Long EUR Duration, we preferred closing our short Bobl ASW normalisation as short German ASW trades have an implied short equity volatility exposure. Exhibit 35 shows the sensitivity of the German ASW per bucket to a shock on the Eurostoxx volatility and the 10y BTP/Bund spread – the latter also cheapening during periods of very weak risky assets, which adds to the increase in our ASW model fair value due to higher equity volatility. All other things being equal, a 10-point spike in Eurostoxx volatility would increase our German ASW model fair value by 3.4bp for the Schatz ASW to 7.5bp for the Bund ASW.

Another reason is that risky assets' implied volatility both in the US and in Europe is low historically and relative to rates volatility (see Exhibit 36). It makes the path of German ASW fair value more asymmetric unless expecting a major compression of the 10y BTP/Bund spread (the excess liquidity factor will not really move before late June).

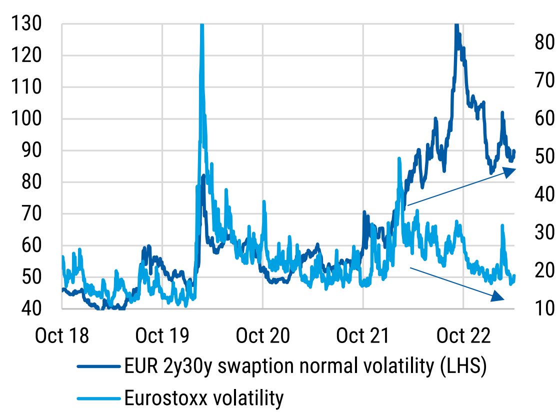
Exhibit 35: Sensitivity of German ASW to equity volatility and the BTP/Bund spread

ASW vs EUR 6m	Schatz	Bobl	Bund	Buxl
1w change in Observed	3.3	0.9	0.3	0.3
1w change in fair value	4.2	3.0	3.3	1.3
FV implied change due to BTP/Bund	4.0	2.7	2.6	0.7
FV implied change due to V2X	0.1	0.2	0.3	0.4

Variables	Schatz	Bobl	Bund	Buxl
V2X	0.34	0.60	0.75	1.01
BTP-bund 10y	0.58	0.39	0.39	0.11

Source: Morgan Stanley Research Estimates

Exhibit 36: Diverging rates and equity volatility with equity volatility back on lows



Source: Bloomberg, Morgan Stanley Research

Moreover, with the ASW setback of the past couple of days and the rise in fair value, the gap to our ASW model fair value fell to "only" 3bp for the Bobl and Bund ASW, which in the current context of low visibility is a very low premium to remain short ASW, in our view.

Another factor that has attracted investors' attention is the change in the ceiling for remuneration of government cash reserves which will move from €STR to €STR minus 20bp on 1 May 2023. Latest available monthly statistics on Eurozone government cash deposits, i.e., for February show EUR301bn versus a peak of EUR570bn in June 2022. While some investors have been buying the schatz ASW on expectations of a richening due to the change in the remuneration of the government cash reserves, we do not think it is an argument to go long short-dated ASW – unless expecting a major risk-off move, which is another rationale – for the following reasons:

- on the repo supply side, the Deutsche Finanzagentur has been providing on a regular basis German bonds that were trading on special to make sure that repo conditions do not diverge too much from the German GC (general collateral bonds). We do not think that its commitment to ensure liquidity conditions on the German repo market will change, implying a low probability of repo squeeze on German papers.

- the government cash reserves are likely to keep falling over the coming months.

- the enhanced ECB QT in 2H – with 75% of PSPP redemptions to be rolled off instead of 50% for the March-June period – should improve the supply/demand equilibrium.

- we think the ECB will not return to the 0% remuneration on the government cash reserves before 1) the amount of reserves goes back to a low level, i.e., perhaps below EUR 100bn, and 2) the ECB QT is fully implement, i.e., perhaps with the 100% roll-off in 2024. It would be the best way to avoid any disruption at the short end of the EUR core curves.

In terms of trade, we maintain our 2s10s German ASW box (short 2y) as the 2y ASW is still quite rich versus the 10y according to our model, but we would consider unwinding it on a small compression move as our initial target seems now too optimistic.

- **Trade idea: Close the short Bobl ASW normalisation on Wednesday.**
- **Trade idea: Maintain our 2s10s German ASW box (short 2y).**

Front-end: Jul/Sep flatteners:

The current dynamics at the front end have been interesting after the uncertainty spurred by the banking sector. In Europe, for example, the market's narrative has been somehow divided between the "inflationistas"and "recesionistas". The former believe the stickiness in core inflation and the economic resilience driven by the services sector are supportive of further monetary tightening. The latter believe the US is headed for recession.

The former see the events occurring in US regional banks as uncorrelated to the old continent, given stronger capital ratios in European banks, a greater level of banking supervision and the absence of deposit outflows into money market funds as seen in the US (see Exhibit 37).

Exhibit 37: Total cumulative AUM of European money market funds (EUR, bn)

Source: Bloomberg, Morgan Stanley Research

The latter struggle to see the ECB pulling the trigger further than a general accepted terminal rate level around the 3.75% -4% camp if the US is headed into an economic slowdown.

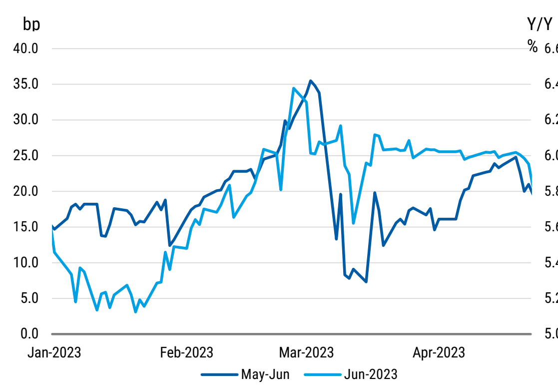
These arguments are somehow reflected as well in front-end dynamics. For example, while subsequent ECB's OIS calendar spreads have been tracking quite closely the market pricing of inflation since the beginning of the year, they've now decoupled, following more closely the dynamics of European banking indices.

By means of example, if we take near-term calendar spreads like May/June ECB's OIS vs. June's fixing and vs. Euro Stoxx Banks Index, we can see how the relationship between the pricing of inflation relative to June's fixings has vanished following the events related to US regional banks (see Exhibit 38 and Exhibit 39).

Exhibit 38: May/June vs SX7E Index

Source:Bloomberg, Morgan Stanley Research

Exhibit 39: May/June vs June HICP Fixings



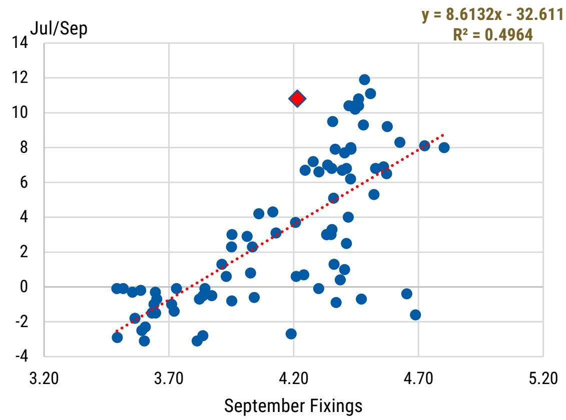
Source: Bloomberg, Morgan Stanley Research

The correlation between ECB's pricing and the dynamics on European banks tends to fade as we move further down the ECB's calendar schedule. Particularly, across the different combinations of calendar spreads, the one yielding the largest R2 vis a vis the market pricing of inflation is the Jul/Sep spread, trading at the time of writing at ~9bp.

The recent repricing in ECB terminal re-steepened this spread substantially, and it is now trading close to its YTD high of ~12bp. Additionally, at current levels, is out of line by roughly 5bp relative to the expectation of headline inflation by September of 4.24% y/y (see Exhibit 13Exhibit 40).

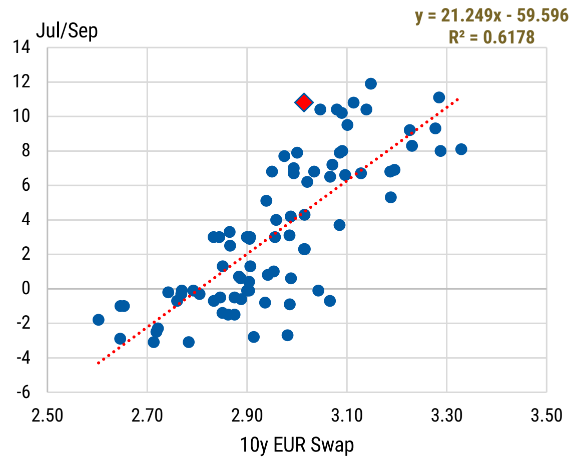
duration environment. The spread failed to flatten in the recent rally, with the relationship depicted in Exhibit 41 calling for Jul/Sep levels close to 0bp on the view that the 10y Bund should richen by ~15bp in the near term towards 2.20%.

Exhibit 40: Jul/Sep vs September Fixing



Source: Bloomberg, Morgan Stanley Research

Exhibit 41: Jul/Sep vs EUR 10y



Source: Bloomberg, Morgan Stanley Research

From a macro standpoint, we interpret Friday's data as slowly converging towards our base case scenario: **(i)** a disinflationary trend which is currently taking place with Friday's prints broadly weak, and lower-than-expected across the board with **(ii)** the first slowdown in growth showing in hard economic data, particularly in core countries.

All in all, this means that 4Q OIS meetings could head flatter than they currently are, consistent with our economists' view of ECB stopping by July at 3.75%.

As such we enter a Jul/Sep ECB's OIS flatteners currently at 9bp, targeting a first move towards 3bp. Stop at 12bp.

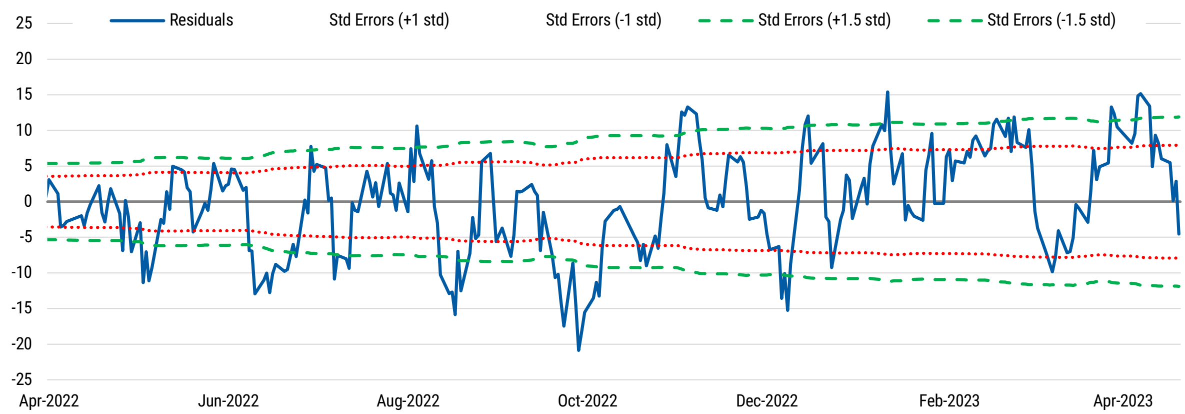
The key risk to the trade is a better string of economic data coupled with higher-than-expected inflation, leading to price in further hikes in 2H 2023.

- **Trade idea: Enter Jul/Sep ECB's OIS flatteners currently at 9bp, targeting a first move towards 3bp. Stop at 12bp.**

Non-Core EGBs: Close SPGBs 2s5s10s

On April 14, in Is A Hard-Rain A-Gonna Fall? we noted the extreme cheapness of the 5y sector on the Spanish curve. This was flagged by our model output on 2s5s10s cash EGBs coupled with relative valuations on the sectors looking at credit barbells.

Exhibit 42: SPGBs 2s5s10s model's residuals



Source: Bloomberg, Morgan Stanley Research estimates

At the time of writing, we think the risk/reward of the trade is no longer appealing given that the residuals from the model's output have normalized fully and actually are showing a degree of richness on the fly close to ~5bp. Additionally the Tesoro announced the offering of the 5y sector in next week reopenings, tapping the Jan 2028 (see here).

Given the valuations and the upcoming supply, we think that the 5y bucket could cheapen back from current levels and as such we exit the trade.

Trade idea: Close long SPGB 0% Jan 2028 vs the SPGB 0% May 2025 and SPGB 3.15% Apr 2033

United Kingdom | Turning neutral on UK duration

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Exhibit 43: Summary of UK rates views

1-month horizon	Duration	Curve	ASW	Inflation
Macro	Neutral	Neutral		Bullish through short-term real rates
Net supply	Bullish	Steeper		
Valuation		GBP 2s5s10s swap fly around FV		
Seasonality	May: Gilt selloff 2w - 69%	GBP 5s10s steepening for 2w in May - 73%	10y ASW widening from d11 - 81%	
Technical analysis	Weekly stochastics now oversold			
Market positioning	CTAs added shorts			
Preferred trades	**Rec Jun'23-Aug'23 MPC Spread**			Long IL28
	Close Pay 2y SONIA			
Our view	**Neutral**	**Neutral**	**Neutral**	**Higher**

Source: Morgan Stanley Research

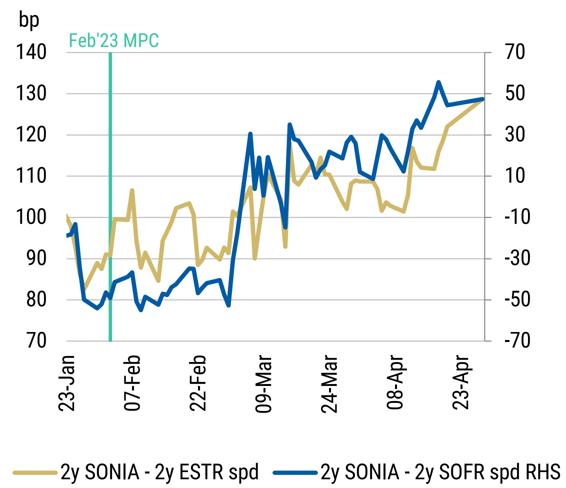
Close 2y SONIA and go neutral UK rates

Being paid 2y SONIA was our core trade over the last month, initiated here, and last week we made a clear case for why we wanted to maintain this position (see here). There are a few things that have happened over the last week that change the outlook so we find the risk-reward not attractive enough to be bearish the front-end any more.

First, there has been a meaningful underperformance of the UK front-end over recent sessions with SONIA rates even moving to opposite directions vs SOFR/ESTR swaps on some occasions (see Exhibit 44). This is clearly unusual, and we are approaching levels where SONIA-ESTR and SONIA-SOFR swap spreads start to look attractive so we suspect that some investors may be keen to flip their duration longs.

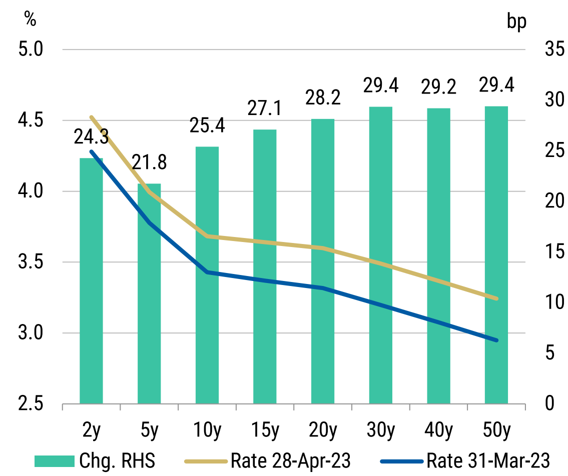
At the same time, we live in interconnected markets and the BoJ's actions have implications. Despite accelerating Japanese inflation, there has been little tightening action in terms of policy changes, and the result has been supportive of global FI. At this stage, we think that this is only marginally relevant yet it could gradually make the UK attractive for global investors.

Exhibit 44: 2Y SONIA cross-market performance



Source: Bloomberg, Morgan Stanley Research

Exhibit 45: SONIA rates monthly change



Source: Bloomberg, Morgan Stanley Research

Second, MPC members had the opportunity to express their concerns on the high March RPI print but they did not (neither Ben Broadbent nor Huw Pill). So we expected them to act as a catalyst for higher rates but they did not. Which means that our initial expectations for additional pricing of hikes in whites and reds may not materialise (or materialise in a bumpier fashion).

Third, we have received indications of stops being triggered in the very crowded GBP swaps steepener theme. For example, we have seen the curve flatten on little/no UK news. So positioning is cleaner and one reason why previously investors wanted to have a bearish front-end bias was for those steepeners/front-end longs to be stopped out. Clearly less potential for such moves from here.

Fourth, we enter a week with little DV01 being issued. This can play in both directions, but there is a higher-than-usual chance for erratic behaviour on low DV01 weeks as both buyers and sellers are likely to be less active (reduced market depth = gappier moves).

Enter Rec Jun'23-Aug'23 MPC Spread

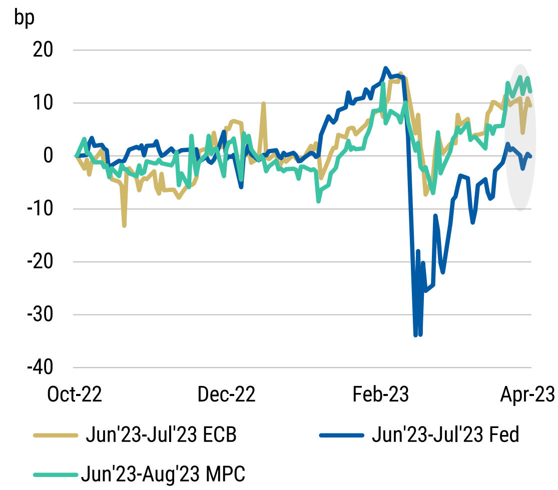
At the same time, we believe that the potential for the front-end of the MPC curve to price in more is getting reduced. UK terminal rate is about 5% (Exhibit 46) implying a further 72bp of cumulative hikes until the Sep'23 MPC, while our economist call is the for the BoE to deliver a final hike in May with the risk of one more in June. But there are about 17bp priced between the Jun'23 and Aug'23 meetings, which we find particularly attractive. The risk is obviously that the BoE has to keep hiking, hence 25bp end up being delivered. But we can see a good case for the market to price in either 1) the BoE guiding the market towards a lower rate, or 2) hiking in slower intervals, i.e. once a quarter.

Having said that, we believe that receiving the Jun'23-Aug'23 MPC spread offers an attractive risk-reward given the current entry point, which is close to a six-month high after having repriced higher compared to similar ECB and Fed spreads (Exhibit 47). In addition, by entering into a MPC flattener we can reduce the trade volatility and minimise any tail risk event impact compared to outright positions.

Exhibit 46: UK terminal rate

Source: Bloomberg, Morgan Stanley Research

Exhibit 47: Cumulative changes since Oct-22



Source: Bloomberg, Morgan Stanley Research

- **Trade idea: Close pay 2y SONIA, entry 3.89%, target 4.89%, stop 3.39%, close 4.52%**
- **Trade idea: Enter Rec Jun'23-Aug'23 MPC Spread: entry 16.9bp, target 0bp, stop 25bp**

UKT Oct-2063 Syndication Preview

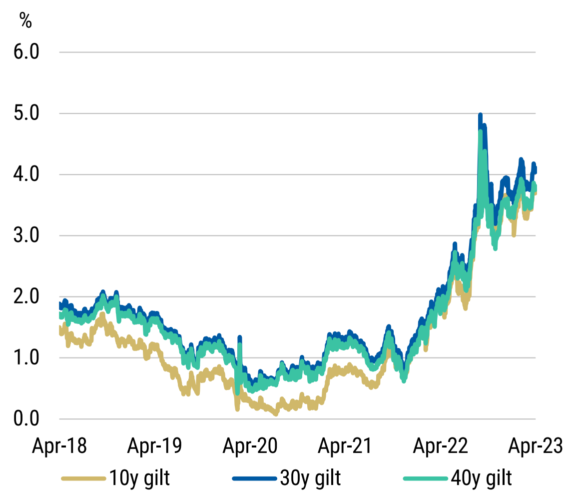
Content from this section was previously published here

UKT 4 10/63 syndication backdrop: According to the issuance calendar for the April-June 2023 period, the UK DMO plans to issue a new 40-year maturity gilt during the week commencing May 15, 2023 (likely on May 16). Given the UK DMO plans to sell £18bn cash of long conventional gilts in four syndications during the entire FY2023-24, we expect a size of £5.0bn cash and c. £10m/bp DV01. On the one hand, this will probably be the longest-tenor bond in this financial year to be syndicated, so the issuance size may be at the lower end of the range. On the other hand, the DMO has previously been willing to issue above-average-size syndications early in the financial year, subject to strong demand. The gilt curve is divided into high-coupon (HC) and low-coupon (LC) gilts so we treat the two separately. At the back-end of the curve this leads to significant differences, with respect to DV01. For example UKT 0H 61 and UKT 4 60 have about 11 years of duration difference, for just 1.75 years of maturity difference.

Outright valuations: The cheapening of UK duration has continued its trend despite short-term deviations, mainly driven by financial sector concerns in the US. As shown in Exhibit 48, yields are currently close to historical highs, excluding the distressed valuations reached in the wake of the mini-budget announcement in September 2022.

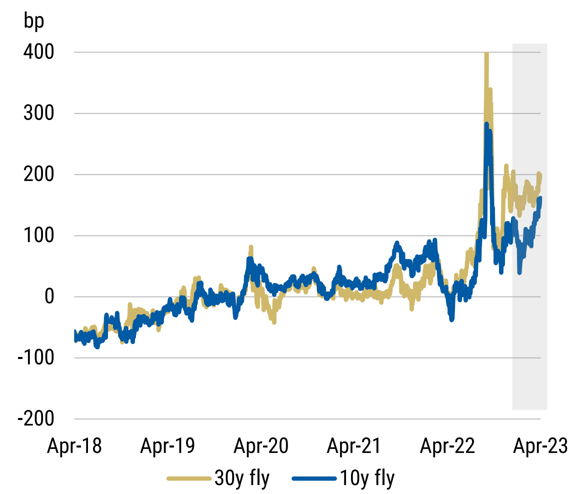
The recent pick-up in real money activity supports the case for strong cash appetite at the UK 4 63 syndication, especially as gilts valuations stand as attractive on a cross-market basis, as shown in Exhibit 49. While we believe this is linked to fundamentals (the risk of higher-for-longer supply in upcoming years), the attractiveness of gilts could support cross-market switches from various asset managers, and potentially also central bank reserve managers. Given current valuations and the high liquidity that the syndication will bring, we expect the event to obtain interest from investors.

Exhibit 48: Evolution of gilt yields



Source: Bloomberg, Morgan Stanley Research

Exhibit 49: 50:50 gilt flies vs USTs and Bunds



Source: Bloomberg, Morgan Stanley Research

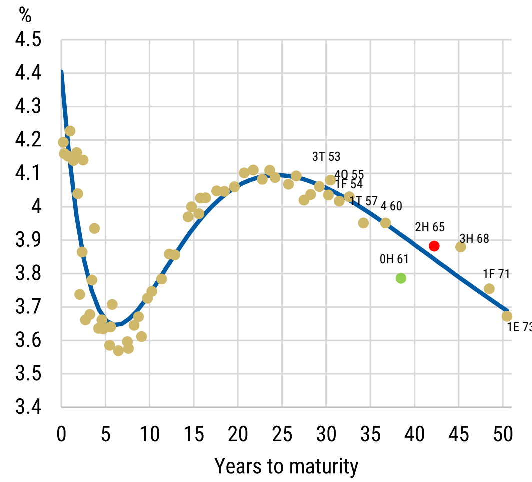
Sector valuations: Looking at the 40-year sector valuations, we use the 2H65 gilt as a 40-year maturity proxy, despite the 0H61 being the current benchmark. The latter bond has a very low coupon (0.5%) and the high duration and convexity imply a significant premium in valuations compared to neighbouring bonds (see Exhibit 50 and Exhibit 51). So this additional cash efficiency makes 0H 61 trade as a structurally rich bond and it is unlikely that the UK DMO will ever again issue such a line in the sector because long-end yields are likely to stay high for longer absent an acute deflation shock. It is also interesting that **many of the low-coupon gilts trade slightly richer** in repo vs high-coupon bonds (see Exhibit 50).

Exhibit 50: Long-end gilts main features

Bond	Maturity years	Duration	Yield %	Z-spread bp	Repo vs SONIA bp
1H 53 (Green)	30.3	21.35	4.05	61.30	2.91
3T 53	30.5	17.64	4.09	62.31	6.43
1F 54	31.5	21.63	4.03	61.24	2.02
4Q 55	32.6	17.57	4.04	59.41	0.98
1T 57	34.2	22.18	3.96	58.30	-3.09
4 60	36.7	19.04	3.96	56.17	0.73
0H 61	38.5	30.85	3.79	52.83	-2.72
2H 65	42.2	22.50	3.89	58.59	3.47
3H 68	45.2	21.44	3.89	59.15	0.79
1F 71	48.5	26.71	3.76	57.26	0.80
1E 73	50.5	29.92	3.68	54.83	-3.09

Source: Bloomberg, Morgan Stanley Research, as of 27/04/2023

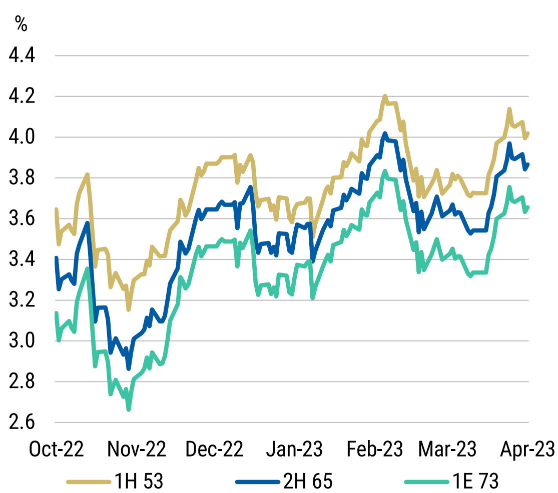
Exhibit 51: Ytm term structure interpolated*



Source: Bloomberg, Morgan Stanley, *Nelson-Siegel-Svensson

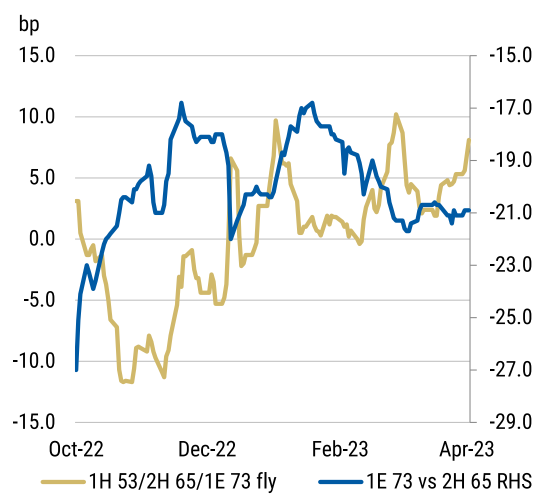
Having said that, despite long-end gilts having cheapened over recent months (Exhibit 52), the 40-year sector looks attractive compared to 30-year and 50-year sectors as shown by: 1) the 1H 53/2H 65/1E 73 fly having cheapened in recent months (see Exhibit 53); and 2) the 1E 73/2H 65 spread having narrowed. Hence, further demand into syndication might come from relative value trades, as investors might switch richer sector bonds into the new UKT 4 63.

Exhibit 52: Evolution of 30/40/50y gilt yields...



Source: Bloomberg, Morgan Stanley Research

Exhibit 53: ...and 40y relative valuations

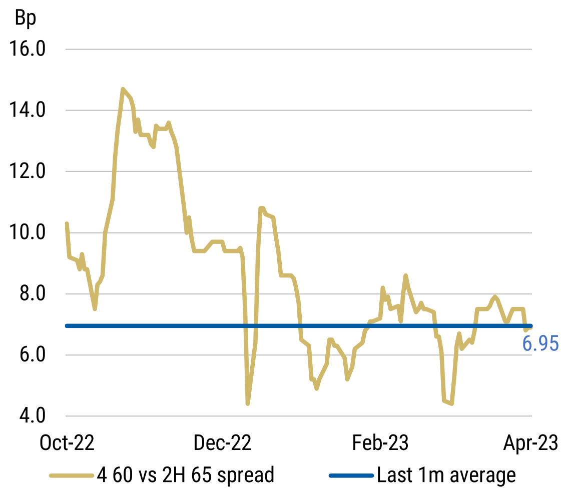


Source: Bloomberg, Morgan Stanley Research

Fair value versus comparator bond UKT 0H 61 at +15bp: For the sake of analysis, it is suboptimal to mix high-coupon and low-coupon gilts**.** So we do not want to use UKT 0H 61 for the UKT 4 63 fair value estimate, but we use UKT 4 60 and UKT 2H 65 due to their coupons being more in line with the new UKT 4 63 (we believe the new bond will come with a 4% coupon given current yield levels). So we start by examining the UKT 4 60 / UKT 2H 65 spread, currently trading at 6.90bp, which is close to the last month's average (Exhibit 54).

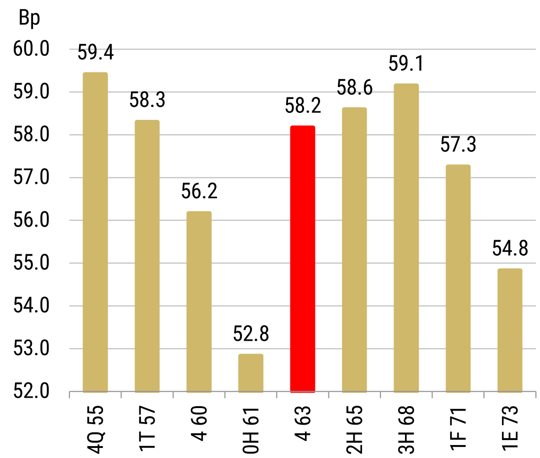
By using a linear interpolation approach, we see the new UKT 4 63 fair value at UKT 4 60 -1.5bp (**including a new-issue discount of 2.5bp** likely required to improve post-syndication performance and compensate investors for the low duration of the new bond). So we can see it valued at UKT 0H 61 +15bp on a yield metric. Using these valuations, we calculated the Z-spread of the new bond and compared it to neighbouring lines (see Exhibit 55). The new UKT 4 63 should come c. 2bp cheaper on Z-spread versus the UKT 4 60 according to our estimate.

Exhibit 54: Comparator gilts yield spread



Source: Bloomberg, Morgan Stanley Research

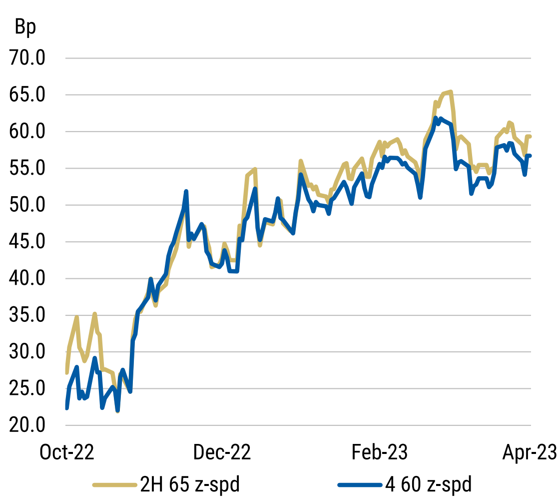
Exhibit 55: Z-spreads for long-end gilts



Source: Bloomberg, Morgan Stanley Research, as of 27/04/2023

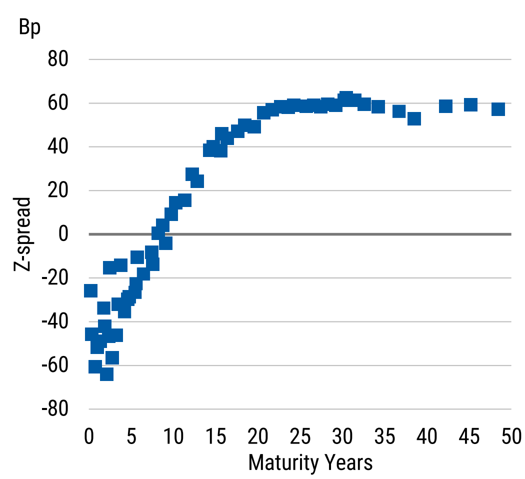
It is worth looking also at the Z-spread evolution over the last six months, shown in Exhibit 56. Valuation looks attractive and this might garner long ASWs demand into the syndication, so long gilts, including the new bond, may be bought on ASW. However, we see risks for a cheapening in ASWs in the long run as buy-out-activity-related flows should outweigh real money hedging-related demand for long-end gilts.

Exhibit 56: Comparator gilts Z-spread evolution



Source: Bloomberg, Morgan Stanley Research

Exhibit 57: Overall gilt Z-spread term structure



Source: Bloomberg, Morgan Stanley Research, as of 27/04/2023

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 | Bullish tailwind

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BoJ policy settings left on hold

The BoJ left monetary policy settings unchanged at its April 27–28 meeting, and as had been foreshadowed in media reports opted to delete its previous forward guidance to the effect that "the Bank (...) expects short- and long-term policy interest rates to remain at their present or lower levels" (in what amounts to an acknowledgment that Covid-19 is how having only a limited economic impact). Somewhat of an easing bias was however maintained as the central bank continued to indicate that it "will not hesitate to take additional easing measures if necessary".

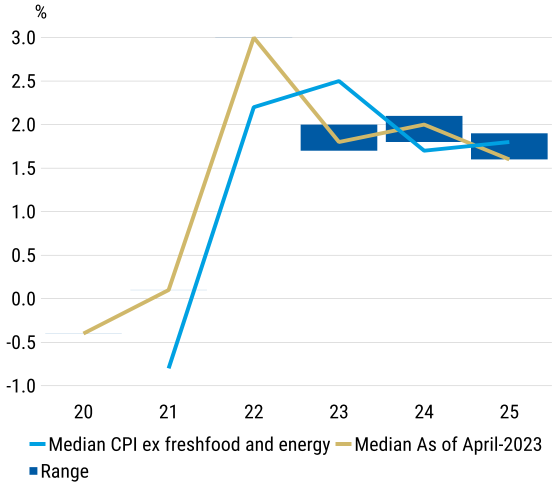
BoJ Governor Ueda suggested at the press conference that they will maintain the YCC framework until they can achieve the 2% price stability target in a stable and sustainable manner, and any minor policy tweaking would be conducted within this framework, **suggesting that they will not remove the YCC framework completely, unless for normalization reasons**.

The quarterly Outlook for Economic Activity and Prices update saw inflation projections revised upwards for FY2023 and FY2024, but initial forecasts for FY2025 came in below +2% on both a CPI ex fresh food and ex fresh food and energy basis (see Exhibit 58). The BoJ also signaled that it sees risks to prices as skewed to the downside for FY2025, suggesting that **it is not yet confident in the sustainability of inflation beyond the shorter term.**

Indeed, Ueda mentioned at the press conference that while the majority has a decent conviction that inflation will slow down below 2% by late this fiscal year, there is little conviction that inflation will pick up once again beyond FY2024.

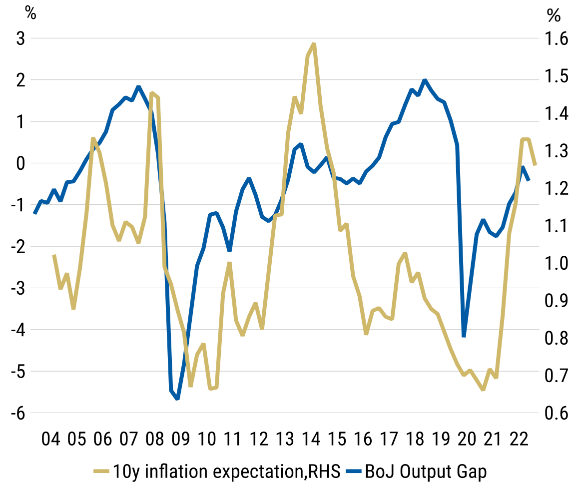
Given that he also mentioned the importance of three measures (output gap, wage growth, and inflation expectations) to assess whether inflation is becoming sustainable, their low conviction regarding the sustainability of inflation should not be surprising as the output gap remains in negative territory as of now, expected inflation rates have basically just been drifting sideways (see Exhibit 59), and—larger-than-usual spring wage hikes notwithstanding—there is still only minimal evidence of inflation accelerating as a consequence of higher wage costs being passed through to consumers.

Exhibit 58: BoJ new inflation outlook



Source: BoJ, Morgan Stanley Research

Exhibit 59: BoJ output gap and Quick 10y inflation expectation



Source: BoJ, Quick, Morgan Stanley Research

As such, he explained—in declaring his intention to continue with monetary easing—that he was less worried about the risk of inflation continuing to overshoot +2% than the risk of prices starting to fall once again at some point in the future. **All in all, the BoJ seems to focus more on the sustainability of inflation rather than the magnitude of headline inflation (which is what markets seem mainly concerned about).**

Markets now appear to recognize that the Ueda-led BoJ has no immediate intention of reacting to cost-push inflation (albeit even accelerating now), and as we had anticipated in "Gov. Ueda's First MPM: Our BoJ Preview and Implications on the Yen Rate Market", initial post-meeting price action points to at least somewhat of an unwinding of positioning on the near-term policy adjustment.

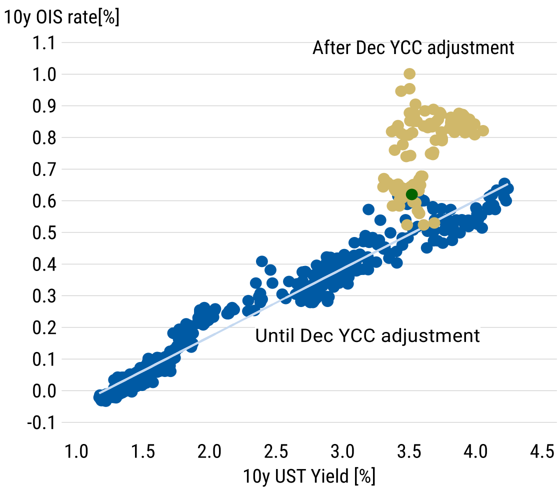
It would also appear that some market participants have interpreted the BoJ's announcement of a "review (...) with a planned time frame of around one to one-and-a-half years" as an indication that significant policy adjustments are liable to prove difficult for some time to come (though BoJ Governor Ueda suggested that it would be possible for the BoJ to adjust policy during the policy review if needed)..

As we discussed in "Ahead Of The BoJ MPM", the swaps curve had until recently remained priced for some sort of adjustment to the "yield curve control" framework by way of a sustainability-enhancing rather than a "normalization" measure (reflecting an expectation that the 10y sector would be sold off under such a scenario) (see Exhibit 60).

But given today's "as is" decision, we believe that many players may now be reluctant to remain positioned to the short side at the cost of incurring negative carry over the seven-week period prior to the next policy meeting.

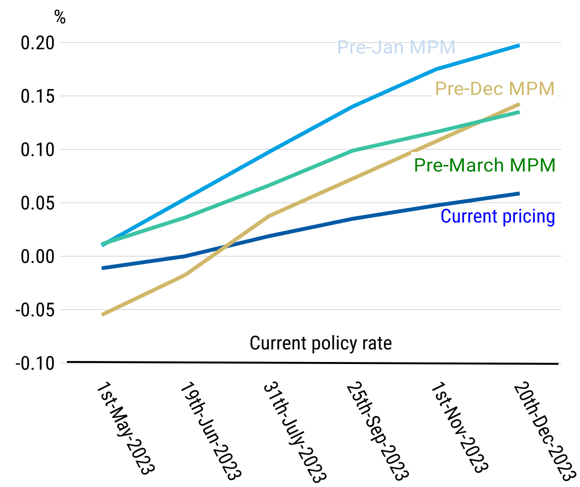
We thus expect market volatility to decline into the long holiday in Japan (assuming that the commencement of a rate hike cycle is still being viewed as unlikely) (see Exhibit 61) and as such continue to see a good prospect of the (high carry + rolldown) 7y–10y sector outperforming on the swaps curve, and 15-20y sector on the JGB curve.

Exhibit 60: 10y UST yield vs 10y TONA OIS yield



Source: Morgan Stanley Research, Bloomberg

Exhibit 61: BoJ rate hike path



Source: Morgan Stanley Research

The super-long sector has been the standout performer in the immediate wake of the monetary policy statement, but some allowance probably also needs to be made for the impact of end-of-month portfolio rebalancing.

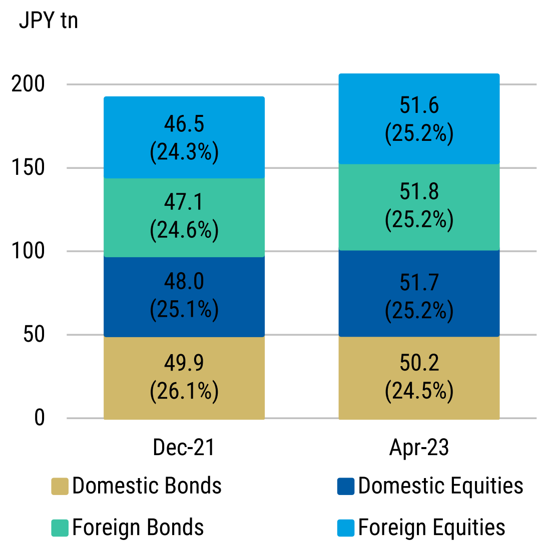
Our analysis had pointed to late-April flows out of other asset classes into domestic bonds (for mark-to-market reasons), and as such we would not be surprised to see 30y+ JGBs start underperforming again once such rebalancing is completed (assuming that many life insurers will probably return to the sidelines for the reasons outlined below) (see Exhibit 62).

- **Trade idea: Maintain JGB 15s30s steepener**
- **Trade idea: Maintain TONA OIS 10s30s steepener**
- **Trade idea: Maintain long 20y JGB ASW vs ESTR**

Major lifers' FY2023 investment plans

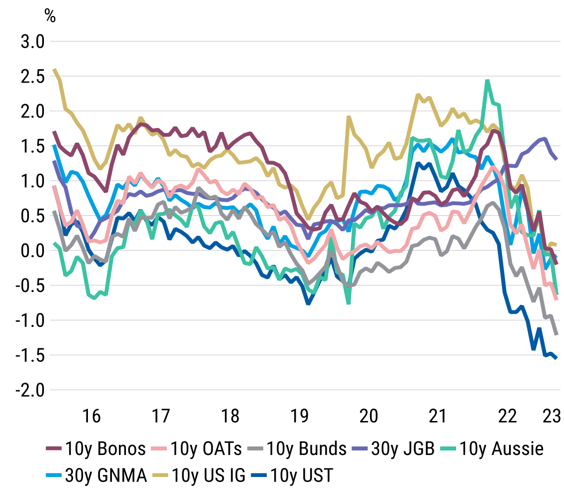
Starting out slow on super-long JGBs? Most major life insurers have now announced their 1H FY2023 (April–September 2023) investment plans (see Exhibit 64, Exhibit 65). As we discussed in "Japan | How Each Investor Can Behave From FY2023?", there still appears to be quite a strong preference for domestic bonds (as opposed to JPY-hedged foreign bond positions) from a relative yield perspective (see Exhibit 63). However, most signaled that they expect the BoJ's "yield curve control" (YCC) to be either further adjusted or scrapped in June or soon thereafter, thereby anticipating the higher yields into fiscal year-end.

Exhibit 62: Expected basic portfolio allocation as of 27 April



Source: GPIF website, Morgan Stanley Research Estimate

Exhibit 63: 30y JGB yield vs 1y FX hedge foreign bond yields



Source: Morgan Stanley Research, Bloomberg

The median end-FY2023 (i.e. end-March 2024) forecast for the 10y JGB yield is indeed 0.7%, with all lifers expecting the curve to face some modest upward pressure (due to YCC adjustments) even if NIRP does indeed end up being left in place. Most do not expect super-long JGB yields to climb more than modestly, and have meanwhile signaled that they might look to accelerate their purchases if yields start to enter the 1.5%–2.0% range.

Of course, such view might be changed post April MPM given Ueda's dovish remarks, but they would likely be reluctant to chase the long-end JGB yield lower at the early stage of new fiscal year.

In any case, the favored strategy thus appears to be one of lifers starting out slowly and then increasing their super-long JGB purchases once yields (presumably) move higher. Lifers are of course among the biggest players in the 30y sector, meaning that the 30y+ portion of the curve is liable to face some steepening pressure if lifers' early FY2023 purchases fall well short of the MoF's massive monthly issuance. This should support our currently recommended 15s30s and 10s30s steepener trades.

Exhibit 64: Major lifers' 1HFY2023 investment plan by each asset class

Company	Domestic Bond	Foreign Bond (FX hedged)	Foreign Bond (Non-FX hedged)	Domestic Stock	Foreign Stock	Alternative / New Growth Area
A	Increase (+JPY 1tn)	Flat (focusing on credit)	Flat ~ Decrease	Flat	Increase	Increase
B	Increase	Decrease	Depends on FX level	Decrease	Depends on stock price level	Increase
C	Increase	Decrease (focusing on credit)	Increase(Mainly sovereign bonds)	Decrease	Increase	Increase
D	Decrease	Decrease	Decrease	Flat	Flat	Increase
E	Decrease (due to redemption)	Decrease(focusing on credit)	Increase (depending on FX level)	Increase	Increase	Increase
F	Decrease (due to redemption)	Decrease (increase credit, decrease others)	Increase	Increase	-	Increase
G	Increase(sov+320bn, credit+50bn)	Decrease(sov -170bn, credit -130bn)		Increase (+20bn)	Increase (+10bn)	Increase
H	Increase	Decrease		Flat~Increase		Increase
I	Increase	Decrease (shifting from UST to credit)		Flat		Increase
J	Increase(+JPY 70bn)	Decrease (-JPY130bn)	Increase (+JPY 30bn)	-	-	-

Source: Morgan Stanley Research, Reuters, Bloomberg

Exhibit 65: Major lifers' FY2023 forecast range for each asset class

Company	JGB 10Y	UST 10Y	Nikkei 225	USD/JPY	EUR/JPY
A	0.30 ~ 1.00	2.50 ~ 4.50	20000 ~ 30000	108 ~ 132	122 ~ 148
B	0.10 ~ 1.30	2.50 ~ 4.00	20000 ~ 35000	110 ~ 140	120 ~ 155
C	0.50 ~ 0.85	2.70 ~ 3.70	26500 ~ 31500	119 ~ 131	120 ~ 139
D	0.20 ~ 0.65	2.80 ~ 3.80	24000 ~ 31000	118 ~ 138	125 ~ 155
E	0.00 ~ 1.05	2.50 ~ 4.50	24000 ~ 31000	115 ~ 140	120 ~ 155
F	0.3 ~ 1.10	3.00 ~ 4.00	26500 ~ 33500	122 ~ 132	129 ~ 139
G	0.30~1.30	2.60 ~ 4.40	22000 ~ 32000	120 ~ 145	127 ~ 154
H	0.30 ~ 0.90	2.30 ~ 4.00	24000 ~ 31500	120 ~ 142	130 ~ 155
I	0.25 ~ 1.00	2.50 ~ 4.00	22000 ~ 33000	115 ~ 145	125 ~ 155
J	0.25 ~ 1.00	3.00 ~ 4.20	24000 ~ 31000	120 ~ 140	130 ~ 155

Source: Morgan Stanley Research, Reuters, Bloomberg, Note: 10y JGB forecasts range median: 0.28% ~ 1.00% (FY-end: 0.70%), 10y UST forecasts range median: 2.55% ~ 4.00% (FY-end: 3.23%), USD/JPY forecasts range median: 118 ~ 140 (FY-end: 125.00)]

"Repatriation" story appears overblown: We are frequently asked by overseas clients about the potential for a large "repatriation" wave. Many lifers have indeed signaled that they will be looking to increase their domestic bond holdings while continuing to cut back on JPY-hedged foreign bonds, but it needs to be recognized that while hedged sovereign bond positions do indeed appear to have fallen out of favor, there still appears to be a healthy appetite for corporate bonds and other spread product offering yields sufficient to cover FX hedging costs.

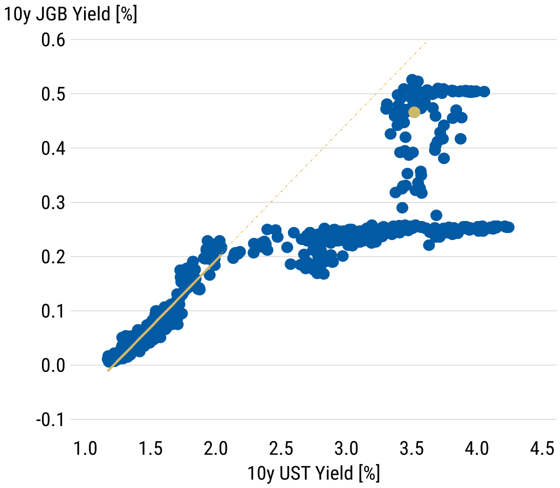
Moreover, some lifers have expressed a willingness to increase their FX-unhedged exposure depending on what happens to exchange rates from this point forward. The consensus forecast is for USD/JPY to drop back to around 125 by end-FY2023, which suggests that demand for (unhedged) foreign bonds could pick up if the JPY should strengthen towards such levels. **We therefore consider it unlikely that repatriation will reach the proportions feared by some overseas investors, which is another reason we find it difficult to be bullish on 30y+ JGBs.**

Potential for turbulence if consensus forecast proves wrong: As mentioned above, there appears to be a very strong consensus among lifers that the BoJ will make some sort of adjustment to YCC in June (by either hiking its ceiling level for the 10y JGB yield or scrapping it altogether), with many seemingly planning to "buy the dip" once that happens. But is it really inevitable that JGB yields will rise in the event of a YCC exit?

Many lifers appear to be banking on US yields declining through end-FY2023 due to the Fed pressing pause on rate hikes and then leaning towards the commencement of a rate cut cycle. Might it not be at least a little optimistic to assume that JGB yields would be driven higher by BoJ policy adjustments even when overseas interest rates are declining?

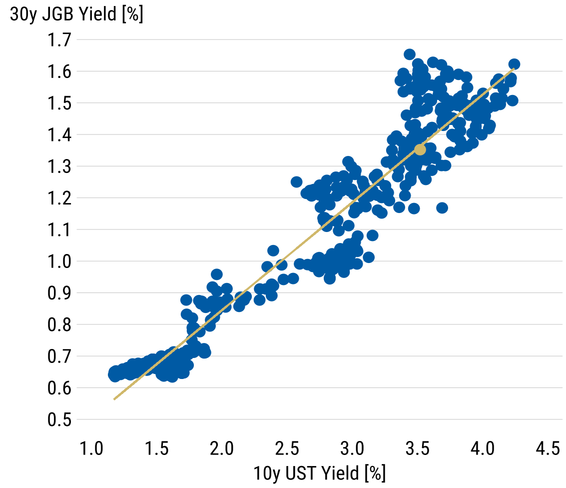
Regression analysis suggests that if the 10y UST yield does indeed decline to around 3.2% (major lifers' median end-FY2023 forecast level), the fair value of the 10y JGB yield should be somewhere in the vicinity of 0.4-0.5.X% (see Exhibit 66). The 30y JGB yield has continued to move in close tandem with US rates even under YCC (reflecting the comparative lack of BoJ intervention further out the curve), and as such might very well end up falling yet further in the event of UST yields entering a downtrend (see Exhibit 67).

Exhibit 66: 10y UST yield vs 10y JGB yield



Source: Morgan Stanley Research, Bloomberg

Exhibit 67: 30y UST yield vs 30y JGB yield



Source: Morgan Stanley Research, Bloomberg

What about a scenario of a YCC exit in June or July but with JPY rates barely rising in response, or one where lifers enter the summer "quiet season" with the YCC still in place? The 30y+ portion of the curve might then face some (possibly quite strong) bull-flattening pressure if lifers look to make up for lost time and ensure that they are not too underexposed to super-long JGBs as of the end-September half-year turn.

Currency & Foreign Exchange

United States

USD | De-dollarization: Business as usual?

We've gotten a lot of questions from clients about the topic of 'de-dollarization', or the idea that countries around the world may move to using other currencies at the expense of the US dollar for reserve holdings and cross-border payments.

Our view is that this process has been ongoing for a while and is likely to continue for the foreseeable future – but at a pace that remains very gradual. History shows that a state of the world where multiple currencies are used for FX reserves and payments is the norm, not the exception, and increased FX market liquidity and diversification benefits (political and economic) support a gradual rebalancing of reserve assets.

For us to be convinced that USD would truly lose its 'exorbitant privilege', though, we would need to see a true competitor emerge. We are not convinced that any other entity has the ability and willingness to supplant USD, particularly given that reserve currency status requires both currency strength (weakening exports) and safe and liquid investable assets (requiring currency convertibility and capital account liberalization).

For now, we expect other currencies to increasingly be used as bilateral media of exchange, but multilateral usage may be farther off.

Europe

EUR | Hold on tight

The euro area bank lending survey (BLS) may be an important EUR catalyst by shaping market pricing for the upcoming ECB meeting, shedding light on the outlook for credit creation in the European banking sector, and influencing the extent to which European banks are prepared for a significant round of TLTRO maturities in June 2023.

We started recommending short EUR partly because we think the market has become too complacent about the risk of a US hard landing and the spillovers this could entail for the euro zone economy and market pricing for the ECB.

Investors also seem convinced that the European banking system remains shielded from developments in the US banking system and will remain resilient to the ECB's ongoing balance sheet reduction.

Any concerning results from the BLS – including much tighter credit conditions, increased funding costs and balance sheet constraints – could challenge the complacency some investors seem to have and weigh on EUR/USD. We continue to recommend short EUR/USD positions.

China

CNY | Why hasn't CNY reacted to positive news from China?

CNY has struggled to react positively to better data from China due to: 1) Concerns about data quality; 2) Cautious sentiment among investors; 3) Equity outflows; and 4) Exporters hoarding USD. We now expect CNY to underperform due to: 1) A lower trade surplus; 2) Outbound tourism; 3) Possible capital outflows; and 4) The PBOC's preference to let fundamentals drive the currency. We recommend short CNH/THB.

Dollar Bloc

AUD/NZD | RBA preview

We continue to recommend short AUD/USD positions. We see continued risks to sentiment stemming from the US banking sector. We think short AUD positions are a particularly efficient way to position for a challenging risk outlook given AUD's high correlation to risk demand (proxied by the S&P 500) and relatively low carry.

We also recommend paying the August RBA meeting positions and receiving the August RBNZ meeting. Much of the underperformance is attributable to the release of 1Q Australian CPI data. However, we see reasons to believe that central bank market pricing will adjust higher in Australia relative to New Zealand: Little further hiking is priced in Australia – in contrast to New Zealand. 1Q Australia wage data may reveal further gains - driving RBA Board concern. And while median and trimmed mean inflation remained subdued relative to market-implied expectations, our economist notes that "over the coming months underlying inflation drivers will accelerate."

G10 FX Trades

Exhibit 68: G10 FX trade ideas

Spot trades		Spot	Target		Stop	
Maintain						
Short EUR/USD	Top Trade	1.099	1.03	6.3%	1.135	-3.3%
Short AUD/USD		0.669	0.62	7.4%	0.70	-4.6%
Short USD/JPY		134.1	120.0	10.5%	137.0	-2.2%
Long USD/CAD		1.354	1.385	2.3%	1.32	-2.5%
Long EUR/GBP		0.883	0.93	5.3%	0.84	-4.9%

Source: Bloomberg, Morgan Stanley Research

USD | De-dollarization: Business as usual?

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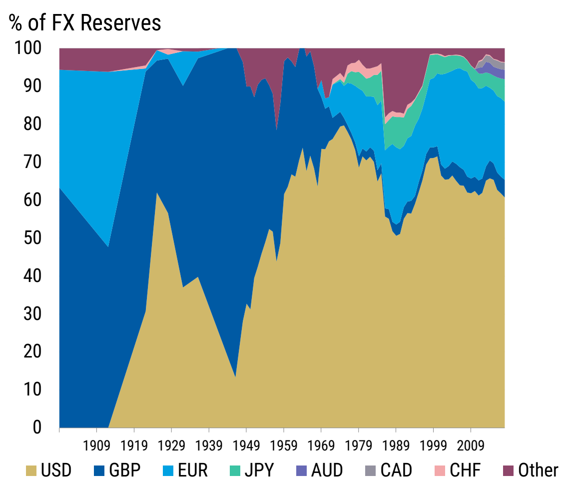
We've gotten a lot of questions from clients about the topic of 'de-dollarization', or the idea that countries around the world may move to using other currencies at the expense of the US dollar for reserve holdings and cross-border payments.

Our view is that this process has been ongoing for a while and is likely to continue for the foreseeable future – but at a pace that remains very gradual. Moreover, we argue that a state of the world where multiple currencies are used for FX reserves and as multilateral media of exchange is the historical norm, not the exception, and a gradual and marginal shift away from the US dollar is consistent with this.

Exhibit 69 shows the time series of 'market share' in FX reserves over the past 150 years. Two things are immediately clear. First, the natural equilibrium for FX reserves is a multi-currency framework. Second, changes in 'market share' can happen rapidly but require truly immense shocks.

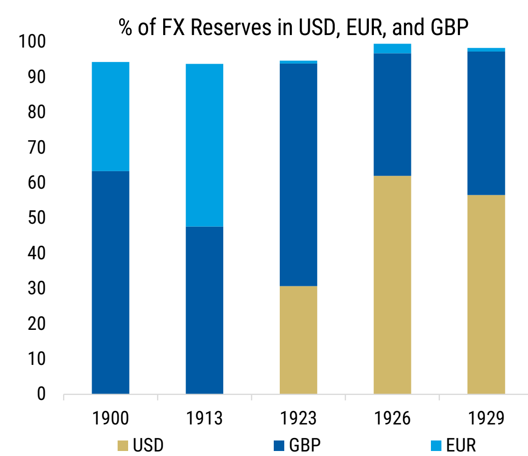
USD's share of FX reserves went from 0% to more than 50% in a matter of a decade, but it took the shock and destruction of WWI to get there (see Exhibit 70). While European combatants left the conflict hobbled with debt and inflation, US GDP rose by 50%. The US's economic dominance only accelerated; in 1946 the US represented half of all global GDP and was a key exporter of all major soft and hard commodities.

Exhibit 69: Global FX reserves by currency denomination, 1900-present



Source: Eichengreen and Flandreau 2008, Lindert 1969, IMF, Morgan Stanley Research; Note: EUR includes DEM, FRF and other eventual eurozone member state currencies.

Exhibit 70: USD rose from almost no FX reserve 'market share' to a majority of reserves in roughly 10 years



Source: Eichengreen and Flandreau 2008, Lindert 1969, IMF, Morgan Stanley Research; Note: EUR includes DEM, FRF and other eventual eurozone member state currencies.

Yet even under the Bretton Woods system, the only time in the past 150 years when the world was on an explicit USD standard, the share of FX reserves held in USD peaked at around 80%. Since the Bretton Woods collapse, its share has been declining gradually.

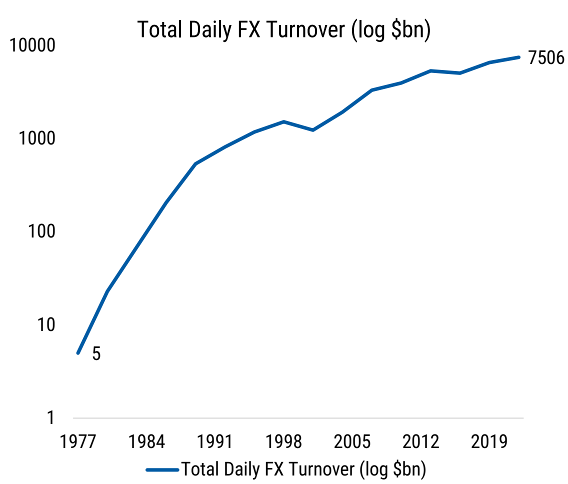
Some of this decline is explained by the growth of competitors – JPY and DEM in the 1980s, EUR in the 2000s, and arguably CNY today. Some is also explained by the growth of the FX market (see Exhibit 71) – the increased liquidity and reduced transaction costs mean that maintaining reserves in a basket of currencies increases diversification and reduces volatility without much additional cost versus holding everything in a single currency.

But we are highly skeptical that recent news, or even this longer-term trend, means the end of USD's 'exorbitant privilege'.

While these 'competitor currencies' have emerged, it's worth remembering that being a reserve currency is as much a blessing as it is a curse. The benefit is that demand for your currency is far higher than domestic factors would suggest, enabling seignorage and providing a stable external source of financing (see Exhibit 72).

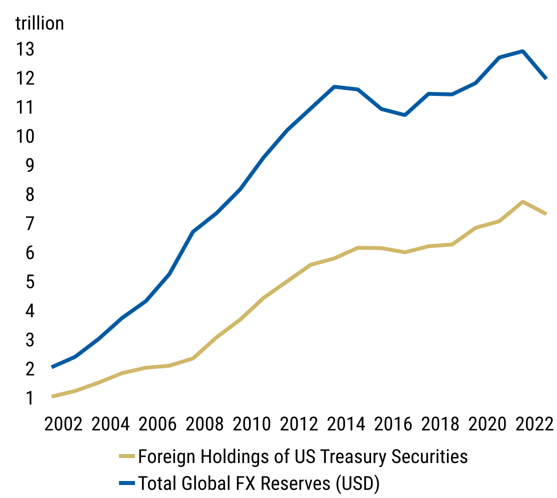
But this comes with challenges too. That same stable demand raises the value of the currency, hurting exports and export-oriented industries. A stable external source of financing means that the supply of safe and liquid assets is available.

Exhibit 71: FX trading volumes have risen from US$5 billion/day in 1977 to over US$7 trillion/day in 2022



Source: Greene 1984b, BIS, Morgan Stanley Research

Exhibit 72: Reserve currency status provides a stable source of external financing



Source: Macrobond, Morgan Stanley Research

Germany and Japan did not appear eager to see their currencies appreciate given that export competitiveness was a key driver of their economic gains in the 1980s. Low levels of national debt also offered limited investable assets, and this has remained a challenge to EUR as well (a shortage of safe assets).

One can also question whether China would be content with a rapidly appreciating CNY. Also, do foreign investors consider Chinese financial assets to be sufficiently safe and liquid?

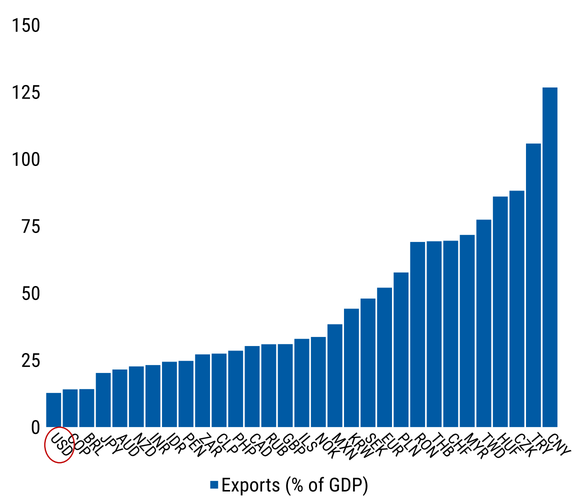
Contrast this with the US, where deep and liquid capital markets are notable and where a strong currency does little to impact domestic economic objectives. US GDP is least explained by global trade of any major economy (see Exhibit 73) and nearly all of its trade is invoiced in USD (see Exhibit 74), rendering USD's value of limited impact on domestic inflation.

The Federal Reserve has not only acknowledged the global importance of USD but enhanced it. Policy tools such as the FX swap lines to support offshore USD liquidity and the FIMA repo pool to liquefy reserve manager holdings in times of crisis both make USD a more attractive reserve currency.

This gets at the fundamental truth about reserve currencies and cross-border transactions in general: once you have the money, what do you do with it? If country A is running a massive trade surplus with country B, it is acquiring net cash as payment. Country A can recycle those funds into country B's capital markets, or it can use that cash to acquire goods and services from a third country. Will that third country accept the cash?

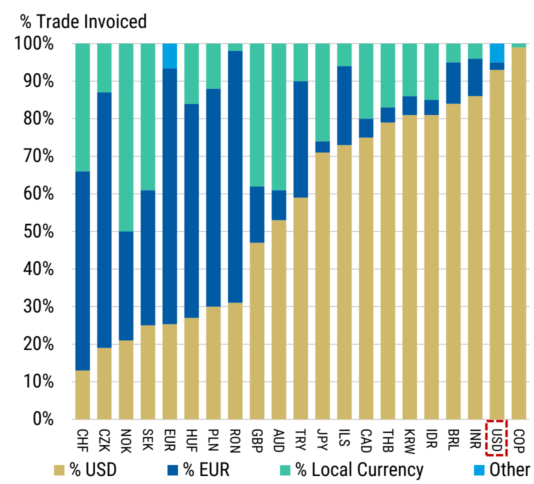
The multilateral element of USD, a function in part of first-mover advantage and network effects, for now remains strong. A process of de-dollarization for bilateral exchanges is likely to continue, but the multilateral element is the river that needs to be crossed for a currency to truly challenge USD's supremacy.

Exhibit 73: The US economy is the most insulated economy in the world



Source: Macrobond, Morgan Stanley Research

Exhibit 74: 93% of US trade is invoiced in USD



Source: Gopinath 2015, Morgan Stanley Research

For us to be convinced that de-dollarization is likely to accelerate, we would want to see a competitor currency tolerate (if not encourage) a stronger and convertible currency and offer deep, liquid, safe assets for investment.

We would also need to see use not just in bilateral trade but also in multilateral trade. Arguably the US using its 'exorbitant privilege' over the USD-based financial system to freeze assets or sanction entities may push some countries away from USD, but it's not clear to where they will turn. Gold is a pretty good store of value but its liquidity and use as a means of exchange are far more limited, and crypto currencies don't offer the stability many would like to see.

In the absence of this emerging competitor, we think that the trend of gradual de-dollarizing will continue as part of a broader multipolar world. FX reserves held by individual countries will be driven by economic as well as political decisions. Countries with strong economic and political linkages to China will likely see their reserve holdings in CNY rise, much as those heavily plugged into the eurozone will likely hold a lot of EUR. But USD is likely to remain a key, if not the key, reserve currency for now.

- **Trade idea: Maintain Long USD/CAD at 1.3540 with a target of 1.3850 and stop of 1.3200**
- **Trade idea: Maintain Short USD/JPY at 136.30 with a target of 120.00 and stop of 137.00**

EUR | Hold on tight

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The euro area bank lending survey may be a EUR catalyst by shaping market pricing for the upcoming ECB meeting, shedding light on the outlook for credit creation in the European banking sector, and influencing the extent to which European banks are prepared for a significant round of TLTRO maturities in June 2023. We continue to recommend short EUR/USD positions.

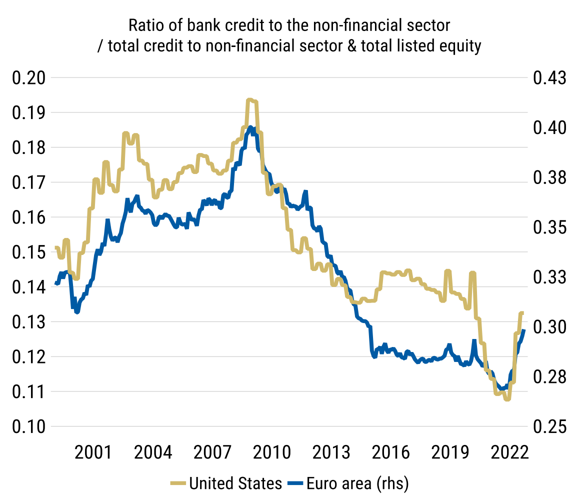
We started recommending short EUR partly because we think the market has become too complacent about the risk of a US hard landing and the spillovers this could entail for the euro zone economy and market pricing for the ECB (see USD | Layering Into USD Longs).

Feedback we've received from clients indicates that some disagree on the timing of our bullish USD view. However, the 1Q2023 euro area bank lending survey (BLS) may be an important EUR catalyst. The survey will be released on May 2.

Why is the BLS important?

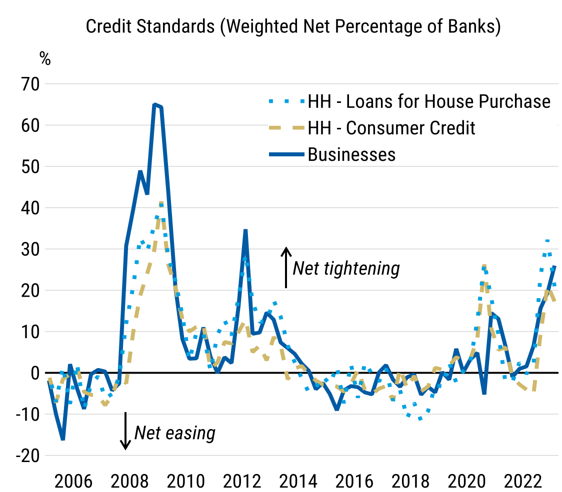
ECB pricing: Several ECB speakers have emphasized over the past weeks that the bank lending survey (in addition to core inflation data released on May 2) will likely determine the size of the rate increase when the ECB meets on May 4.

Exhibit 75: Bank lending plays a more important role in the provision of credit in Europe than in the US



Source: Macrobond, Morgan Stanley Research

Exhibit 76: Banks reported a substantial tightening of credit standards in 4Q 2022



Source: ECB Statistical Data Warehouse, Macrobond, Morgan Stanley Research

As our Europe economics team points out, the BLS is one of the most complete and detailed sources of information for the ECB on the health of the banking system. With market pricing implying a high likelihood of either a 25bp or a 50bp rate hike, we expect investors to pay close attention to the results of the survey.

Our economist expect the ECB to increase its policy rate by 25bp, while remaining highly data dependent (see Tightening Softly).

Growth outlook: The EU has a more bank-based than market-based financial system than the US. The euro area economy is more reliant on bank lending as a funding source relative to the US. The ratio of bank credit to total credit to the non-financial sector and stock market capitalization has consistently been higher in the euro zone than in the US (Exhibit 75; note the scale difference of the two axes).

Recent banking sector concerns have been concentrated in the US. However, the prospects for European credit creation will likely impact investors' perception of the European and EUR outlook.

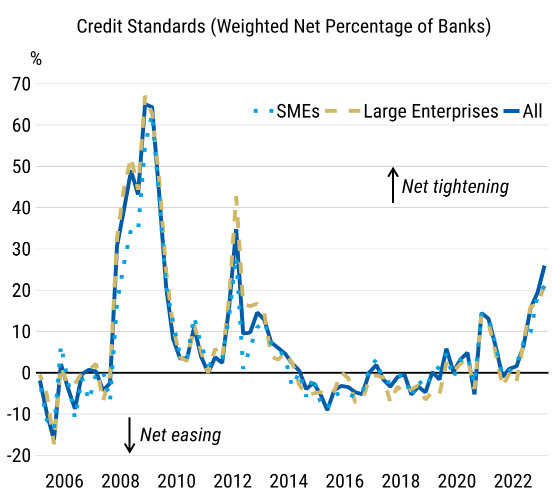
For example, the ECB's eighth Economic Bulletin of 2022 highlighted how the BLS results closely track subsequent actual loan growth and lending rate developments.

Supply conditions: The 4Q BLS already showed that credit standards tightened significantly in the last three months of 2022. The positive percentage in Exhibit 76 indicates that a larger proportion of banks tightened credit standards, whereas a negative percentage would have indicated net easing.

This tightening of credit standards was broad-based, as banks reported tighter conditions for both business and household loans (Exhibit 76), with little distinction between small and large enterprises (Exhibit 77Exhibit 70). The net percentage of banks reporting such a tightening reached levels last seen during the pandemic and the European sovereign debt crisis.

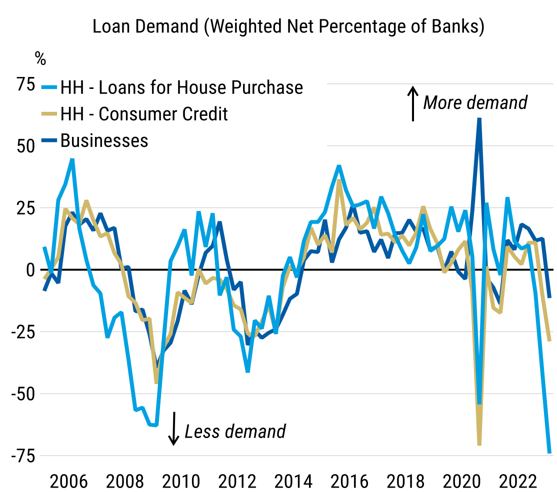
Given that the BLS asks respondents about the drivers behind changes in credit standards, we will also get an update on whether funding costs and balance sheet constraints are the reasons why banks are reducing their lending – a sign that would be more worrying than a more general reduction in risk tolerance.

Exhibit 77: Credit standards have tightening for both small and large businesses



Source: ECB Statistical Data Warehouse, Macrobond, Morgan Stanley Research

Exhibit 78: Loan demand slowed sharply at the end of 2022



Source: ECB Statistical Data Warehouse, Macrobond, Morgan Stanley Research

Demand conditions: Demand for loans by firms and households also deteriorated (Exhibit 78). The net percentage of banks reporting an increase in firms' loan demand turned negative. Banks reported the first decline in demand since the beginning of 2021.

Meanwhile, demand for household loans moved further into negative territory, with the net percentage or banks reporting lower demand for loans for house purchases surpassing the negative levels during the GFC (Exhibit 78).

Banks reported that interest rate increases were one of the main factors behind the sharp reduction in demand (Exhibit 80). Given that since the ECB is expected to continue raising rates, one could see interest rates further weighing on demand (since the 4Q survey the ECB hiked by another 100bp).

The BLS also includes questions on the expected change in credit standards and loan demand three months ahead.

In January, euro area banks had mixed expectations about credit standards and loan demand in 1Q of 2023 (Exhibit 79). While the net percentage of banks still expected lower demand (as indicated by the negative numbers in the columns showing loan demand in Exhibit 79), the slowdown was anticipated to be less steep than in 4Q 2022 (i.e., a lower net percentage of banks expected a net tightening compared to 4Q).

Similarly, credit standards were expected to remain tight from a historical perspective (see positive numbers in the credit standards columns for 2023E), though most banks did not foresee substantial further tightening.

Exhibit 79: Credit standards were expected to remain tight in 1Q 2023, but with slightly fewer banks reporting tighter conditions compared to 4Q

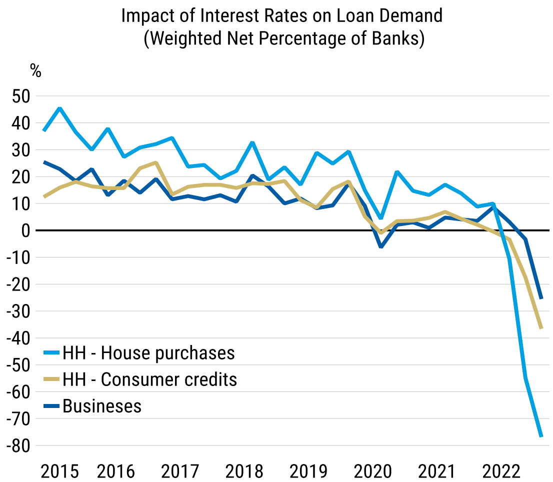
	Enterprises				Households - House purchase				Households - Consumer credit			
	Credit standards		Loan demand		Credit standards		Loan demand		Credit standards		Loan demand	
	Q4 2022	Q1 2023E	Q4 2022	Q1 2023E	Q4 2022	Q1 2023E	Q4 2022	Q1 2023E	Q4 2022	Q1 2023E	Q4 2022	Q1 2023E
Euro area	26.0	24.3	-11.4	-15.4	20.9	15.8	-74.2	-49.0	17.3	14.8	-28.9	-19.7
GER	19.4	16.1	-32.3	-25.8	28.6	14.3	-92.9	-39.3	25.0	28.6	-46.4	-21.4
FRA	41.7	25.0	8.3	0.0	10.0	0.0	-90.0	-70.0	14.3	0.0	-35.7	-28.6
SPA	33.3	25.0	8.3	-25.0	20.0	10.0	-20.0	-30.0	33.3	25.0	-16.7	-41.7
ITA	27.3	36.4	0.0	0.0	18.2	27.3	-45.5	-63.6	0.0	0.0	-30.8	-23.1

Source: ECB Statistical Data Warehouse, Morgan Stanley Research

However, these expectations were reported before the turmoil in the financial system that started in March. Given the global nature of the financial system, it is reasonable to assume that credit standards might have tightened more than euro area banks had anticipated when they submitted their 4Q answers in January of 2023.

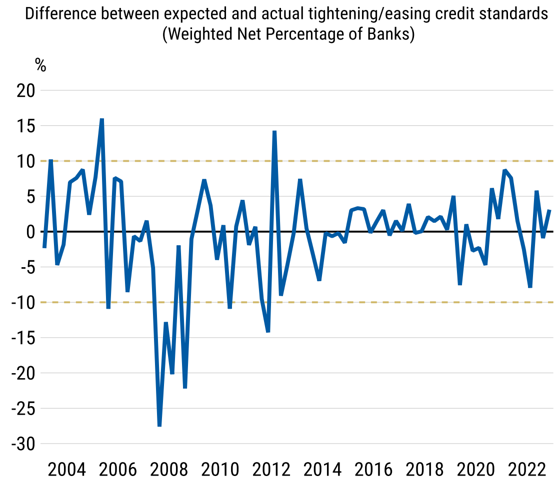
Our European economists flag that if the net share of banks experiencing tighter credit standards were to increase from 26% in 4Q to over 35% in the May BLS, it would constitute a much greater tightening than anticipated by the 3-month ahead measure of the survey. They note that the difference between expected and actual credit standards has only been greater than 10 percentage points during periods of financial distress (Exhibit 81).

Exhibit 80: Higher interest rates are having a significant impact on loan demand



Source: ECB Statistical Data Warehouse, Macrobond, Morgan Stanley Research

Exhibit 81: Large differences between expected and actual credit standards tend to occur during periods of financial distress



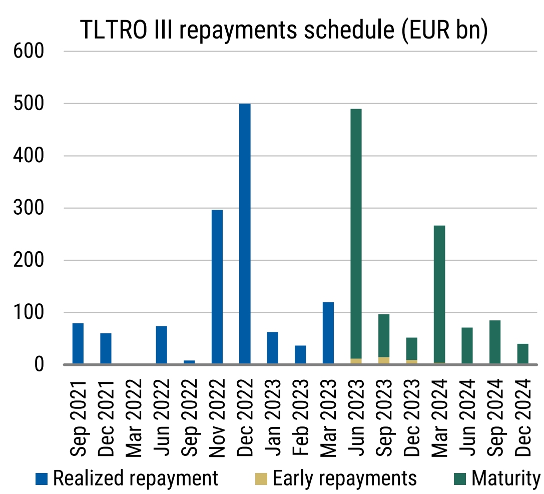
Source: ECB Statistical Data Warehouse,, Morgan Stanley Research

Finally, the survey could reveal new information on how European banks have fared since banking stresses emerged in March. The ECB included an additional open-ended question in the 1Q 2023 survey, asking about other important issues impacting bank lending behavior over the past three months.

An expensive summer

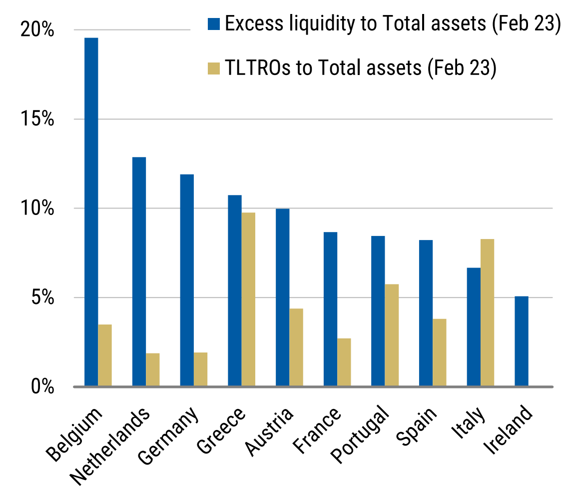
A further source of concern for European banks and the euro area economy could come in June, when mandatory repayments of largest tranche of the **targeted longer-term refinancing operations** (TLTROs, namely the TLTRO trance from June 2020) will become due (Exhibit 82, see 50, Now Lost in Transmission).

Exhibit 82: Our economists estimate that banks will have to repay €489.8bn of TLTROs in June



Source: ECB Statistical Data Warehouse, Morgan Stanley Research forecasts

Exhibit 83: Some countries that are more reliant on TLTROs have less excess liquidity to repay those maturing loans



Source: ECB Statistical Data Warehouse, Morgan Stanley Research

The recalibration of TLTRO conditions last October already meant that European banks will not have the same source of cheap funding going forward, suggesting less (favorable) lending to the real economy (all else equal). Early repayments may add to such a development.

Moreover, southern European countries still seem to be more reliant on TLTROs, while having lower excess liquidity necessary to repay maturing loans (Exhibit 83). The IMF recently highlighted the possibility that fragmentation concerns could resurface (see page 10 of the April 2023 Global Financial Stability Report).

One factor that might soften the impact of reduced liquidity and higher financing costs could be the higher NII from the ECB's tightening cycle and the lower deposit betas compared to the US. Our European economics team also points to the possibility of the ECB announcing a bridge operation before the June TLTRO repayment will be due.

In our conversations with macro investors, many appear confident that the European banking system is isolated from US banking system developments and will remain resilient to the ECB's ongoing balance sheet reduction. Therefore indications to the contrary (for example, concerning data in the bank lending survey or the announcement of bridge operations at the ECB's May meeting) may surprise investors and therefore weigh on EUR.

Given the complexity of the BLS, we note that the impact on EUR might not be immediately evident, as investors likely need some time to digest all the information contained in the survey.

- **Trade idea: Maintain Short EUR/USD at 1.0990 with a target of 1.0300 and stop of 1.1350**
- **Trade idea: Maintain Long EUR/GBP at 0.8770 with a target of 0.9300 and stop of 0.8400**

CNY | Why hasn't CNY reacted to positive news from China?

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We have been holding a more constructive view on CNY since early October on the back of the view that China reopening could be faster than the market expectation (see EM Strategy: Asia Macro Strategy: Are We Reaching a Watershed Moment for China? November 1, 2022).

Our thesis was that: 1) The reopening could surprise investors; 2) China growth could improve and beat the market expectation; 3) Equity inflows could pick up; and 4) Exporters could start to increase their FX conversion ratio by selling USD and buying CNY.

CNY appreciation has stalled: The bullish CNY recommendation worked well between October and January. But since then, CNY has been trading sideways and a bit weaker versus USD. This happened despite consistent better-than-expected economic data, especially trade data. What is more striking is that when the March trade surplus printed at US$88 billion, doubling the market expectation, CNY didn't react to the print at all.

Why is CNY not outperforming? Our bullish view on China growth and risky assets remains firm and intact (see EM Strategy Update: What Do Your Peers Think about Asia/China? April 14, 2023). But as strategists, we need to respect the market should the market not move in line with our view. We believe that there are a number of factors which explain why CNY is not outperforming:

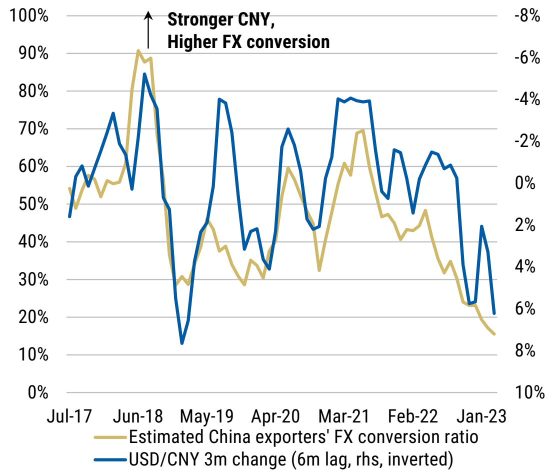
1. **Data quality:** Despite the economic data being better than expected, investors have expressed some doubts about the quality of the data. For example, total social financing has been strong but inflation is low; this raises the question about the velocity of credit and possible stagflation in China. Another example is that the export data to Singapore don't match Singapore's imports from China.

2. **Weak sentiment:** Growth data have been better, driven by the consumption and services sector recovery, but sentiment on the ground in mainland China and among foreign investors are not great, as illustrated in our marketing feedback note.

3. **Equity outflows:** Northbound equity inflows haven't materialised yet as foreigners are reluctant to directly own Chinese stocks due to the doubt about the durability of the policy shift and geopolitical tensions (China has seen net equity outflows of US$12 billion since late February). Rather, foreign investors are keen to own European stocks that have China exposure.

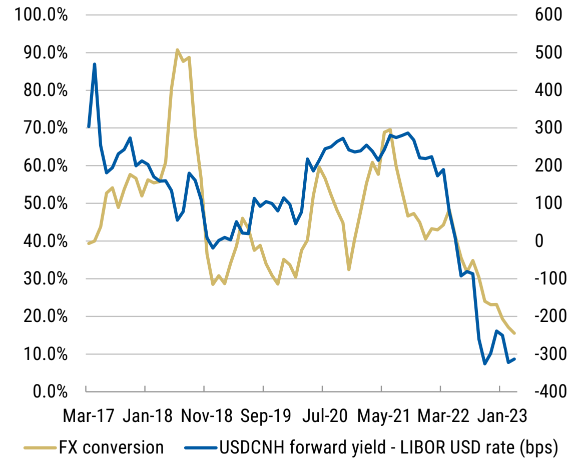
4. **Exporters not converting:** Exporters are not yet converting their USD holdings into CNY. This has been one of our key theories to be bullish on CNY as exporters tend to chase the market when USD/CNY is lower. However, the FX conversion ratio remains low, probably because they still see the higher onshore USD deposit rate as attractive (Exhibit 85).

Exhibit 84: Exporters' FX conversion is low



Source: Bloomberg, SAFE, Morgan Stanley Research

Exhibit 85: US-China rate differential still in favour of exporters holding USD



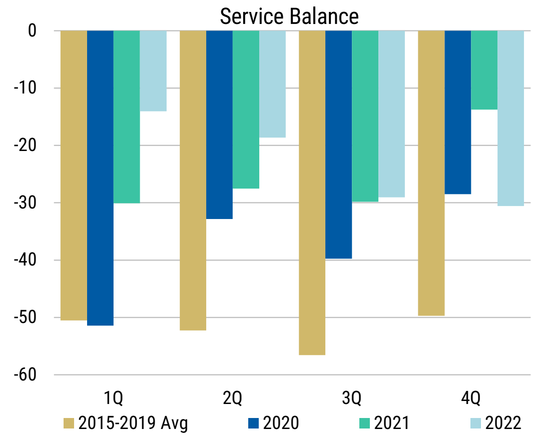
Source: Bloomberg, SAFE, Morgan Stanley Research

Factors which could affect CNY in the rest of 2023: While we have been holding a more constructive view on CNY, we highlight that it is short-term view and our medium-term view is for CNY to underperform (see EM Strategy: Asia Macro Strategy: Taking the Pulse of China's Recovery, April 3, 2023). Given that CNY hasn't performed in line with our expectation, we feel that time is running out and there are factors which could weigh on CNY in the next few months:

- **The trade surplus could decline:** This has been investors' consensus into 2023 but so far in 1Q it hasn't materialised yet. But we think that the risk of a lower trade surplus is increasing into 2H with better domestic demand and lower exports due to recession risk in the western world. The recent State Council Notice to boost exports also suggests that the authorities are concerned about that.

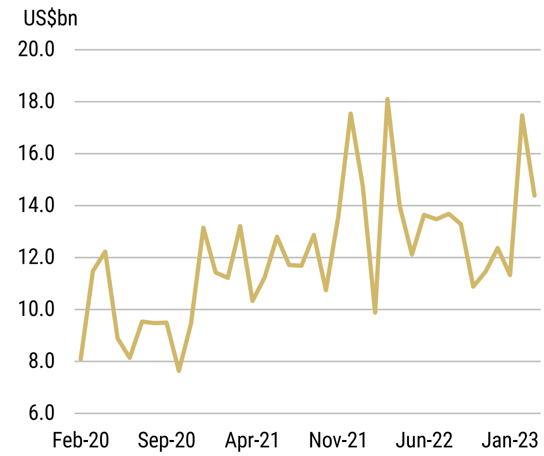
- **Outbound tourism could increase:** Second, outbound tourism is picking up nicely so far this year and could accelerate in 2H. The services deficit used to be US$240 billion a year before the pandemic and has come down to less than US$100 billion in 2022. With increasing flight capacity, there should be more outbound Chinese tourists in 2H. We have already seen signs of that. The number of mainland tourists going to Thailand has increased to 270k in March. The monthly FX settlement under the services category also increased to US$17 billion in February and US$14 billion in March.

Exhibit 86: The services deficit has halved in the past three years



Source: Bloomberg, SAFE, Morgan Stanley Research

Exhibit 87: Monthly FX settlement under the services category in 1Q has increased



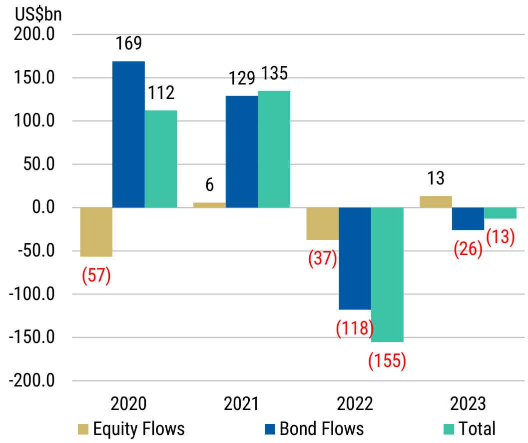
Source: Bloomberg, SAFE, Morgan Stanley Research

- **Capital outflows could increase a bit:** With more Chinese people overseas, there could be some capital outflows via errors and omissions as well. Errors and omissions are the hidden outflows. The number was about US$200 billion before the pandemic and was US$91 billion in 2022. One good example is the new insurance premium bought by mainland people in Hong Kong. These insurance products would need mainland people to sign off when they are physically in Hong Kong and these payments are sometimes via non-official channels. Before the pandemic, it was around HK$80 billion a year. Last year, it was just HK$1 billion.

- **The PBOC might be ok with some CNY underperformance:** With a possible weakening balance of payments, the PBOC could tolerate more fundamental-driven CNY underperformance. This would be in line with its long-term policy since 2015. Put another way, with a worsening balance of payments, the PBOC might not have the appetite to strengthen CNY. This could take away the upside potential for CNY.

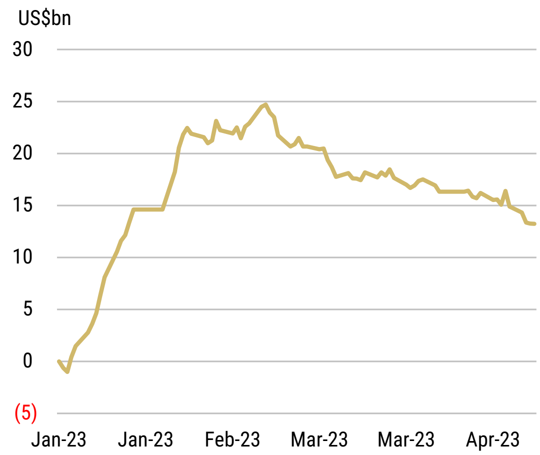
- **One silver lining is that capital outflows would be limited in 2023:** Bond outflows were the main driver of CNY weakness in 2023 as the market saw US$118 billion of outflows from the Chinese fixed income market. Year-to-date outflows seem big, i.e., US$26 billion as of March. However, as we pointed out in China's Capital Flows: Resetting and Stress Testing, November 8, 2022, most of the active managers who wanted to leave the Chinese bond market are already out. This leaves remaining investors in the Chinese bond market, who are more sovereign wealth funds, central banks and benchmark investors.

Exhibit 88: Large outflows last year drove a weaker CNY



Source: Bloomberg, CEIC, Morgan Stanley Research

Exhibit 89: Equity inflows stalled in late February but overall equity flows matter less for CNY over the medium term



Source: Bloomberg, Morgan Stanley Research

Overall, we bring forward our medium-term cautious view on CNY given the factors described above. We close our short SGD/CNH recommendation. Instead, we believe that CNY could be a good funding currency. We recommend short CNH/THB, targeting 4.75 with a stop at 5.00. The risk to the trade is a fast FX conversion by Chinese exporters.

- **Trade idea: Enter short CNH/THB at 4.92 with a target of 4.75 and stop of 5.00**

AUD/NZD | RBA preview

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We continue to recommend short AUD/USD positions. We also recommend paying the August RBA meeting positions and receiving the August RBNZ meeting.

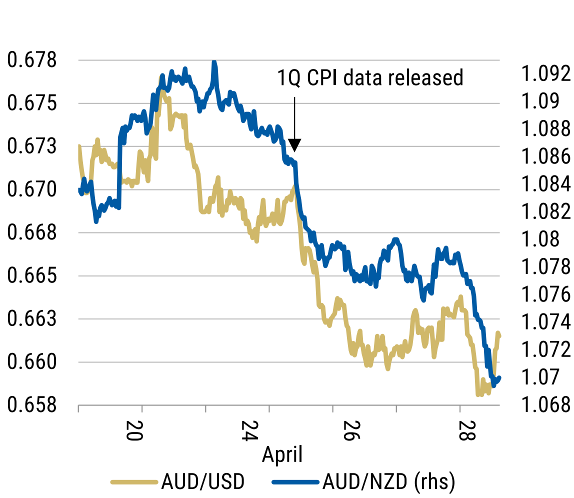
AUD has broadly underperformed over the past week. Exhibit 90 illustrates AUD's recent decline against both USD and NZD.

Much of the underperformance is attributable to the release of 1Q Australian CPI data that suggested inflation has peaked - which will be no surprise to the RBA Board, which acknowledged as much at its April meeting.

The 1Q CPI data were mixed. Headline inflation rose faster than expected during 1Q – at a 7.0% pace vs. 6.9% median sell-side forecast.

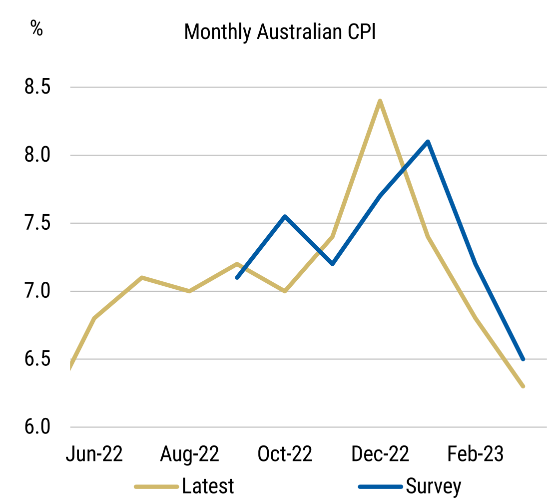
However, a monthly breakdown indicated that March data represented a third consecutive downside surprise (Exhibit 91). Trimmed mean and median CPI also rose at a slower pace than anticipated.

Exhibit 90: AUD has underperformed after 1Q CPI data was released



Source: Bloomberg, Morgan Stanley Research

Exhibit 91: Monthly CPI has surprised to the downside for three consecutive months



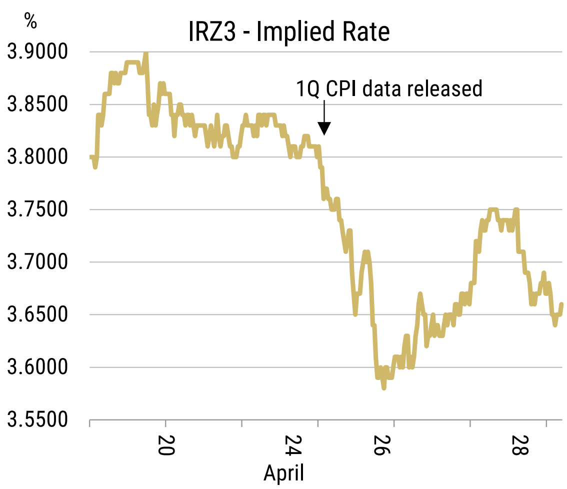
Source: Bloomberg, Morgan Stanley Research

These underlying details weighed on market pricing-implied RBA expectations.

The RBA had indicated at its April meeting that "monetary policy ***may*** need to be tightened at subsequent meetings and that the and that the purpose of pausing at this meeting was to allow time to gather more information" (emphasis added).

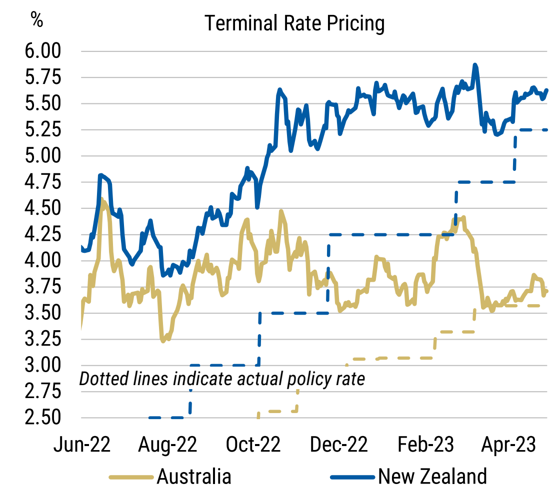
Market pricing indicated that investors concluded that the data released since the April meeting reduced the urgency to tighten further. Market-implied rate expectations for end-2023 fell around 20bp in the day following the release.

Exhibit 92: Australian rate expectations declined after the 1Q CPI print



Source: Bloomberg, Morgan Stanley Research

Exhibit 93: Market pricing implies further hikes from the RBNZ but little from the RBA



Source: Bloomberg, Morgan Stanley Research

However, we see reasons to believe that central bank market pricing will adjust higher in Australia relative to New Zealand:

1) As we have previously noted, very little further hiking is priced in Australia. That contrasts with New Zealand, where around 40bp of hiking is priced (Exhibit 85).

Further hikes priced from the RBNZ contrasts with signaling from that central bank. The RBNZ emphasized the importance of "maintaining the current level of lending rates for households and businesses" to reduce inflation and inflation expectations – opening the door to a pause in May.

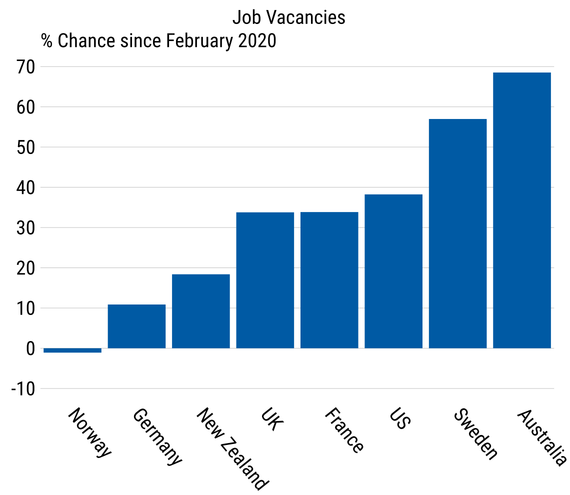
2) 1Q wage data (released on May 16) may reveal further gains – driving RBA Board concern. Labor market tightness was one reason why the RBA considered hiking 25bp in April.

Despite large immigration inflows, Australian labor market remains tight relative to other G10 economies (as job vacancy data illustrates - see Exhibit 94).

Data released on April 12 revealed that the Australian unemployment rate remained at 3.5% (vs. expectations for a rise to 3.6%) - a rate below peer economies like the UK and Canada. Private sector wage gains have been particularly robust (Exhibit 95).

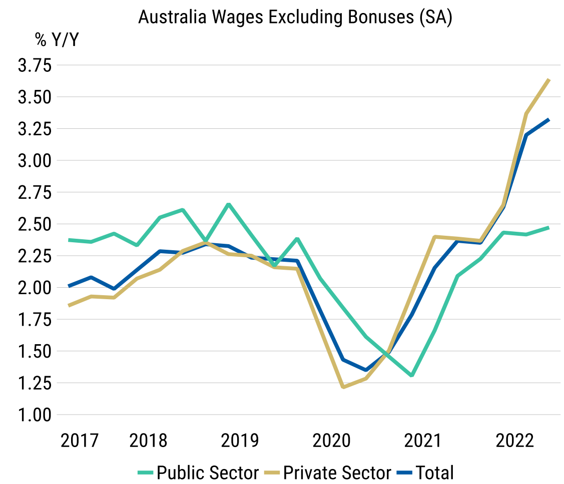
As a result, the RBA's updated forecasts may flag additional incremental wage pressures, tilting the Board's tone further toward signaling the hikes our economist expects later this year.

Exhibit 94: Job vacancies remain elevated in Australia



Source: Macrobond, Morgan Stanley Research

Exhibit 95: Wages are set to increase further

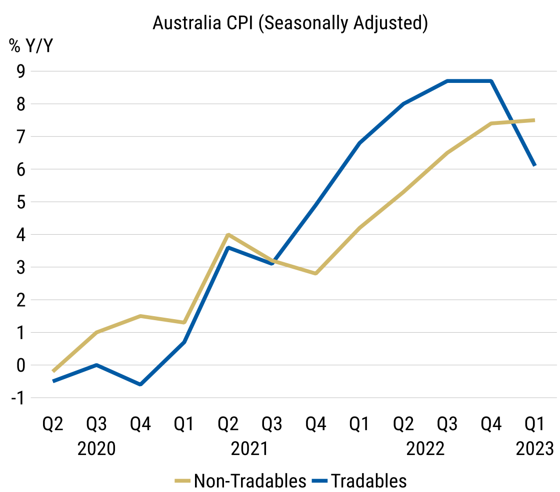


Source: Macrobond, Morgan Stanley Research

3) While median and trimmed mean inflation remained subdued relative to market-implied expectations, our economist notes that "over the coming months underlying inflation drivers will accelerate."

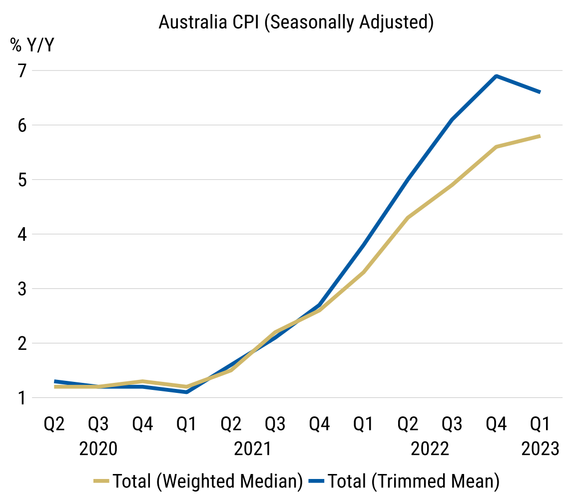
Moreover, non-tradable inflation (Exhibit 88) and weighted mean (Exhibit 89) inflation have decelerated but have not yet declined on a y/y basis - raising the possibility that the RBA forecasts a continued y/y rise in these metrics.

Exhibit 96: Tradeable inflation has not yet clearly peaked



Source: Macrobond, Morgan Stanley Research

Exhibit 97: Weighted median inflation has not yet clearly peaked



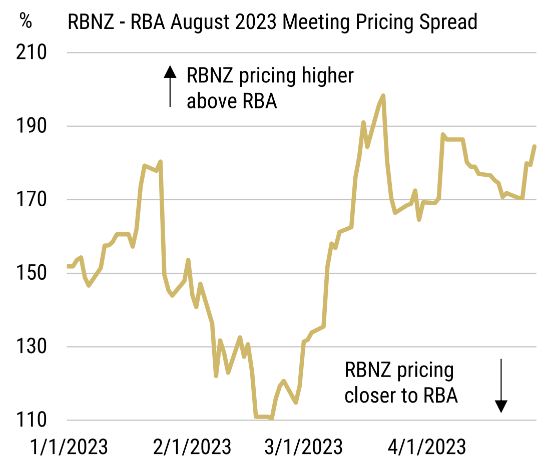
Source: Macrobond, Morgan Stanley Research

Therefore we continue to recommend paying the August RBA meeting (at which our economist expects a further RBA hike) against receiving the August RBNZ meeting (Exhibit 98).

The market pricing spread between the two August meetings has been little changed on net at around 185bp since we originally recommended the trade last month.

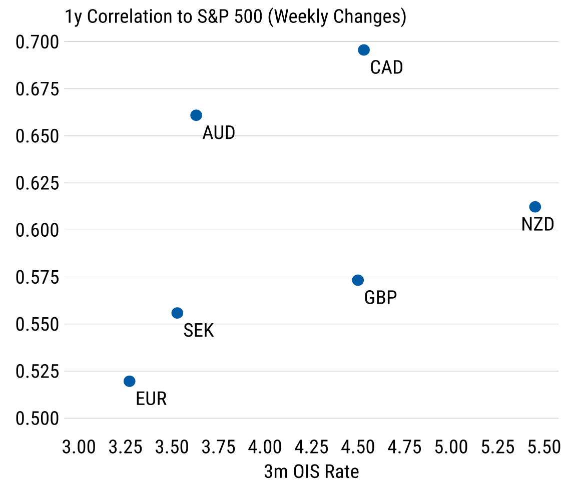
However, we recommend maintaining the position into the May RBA meeting - particularly given its positive carry profile.

Exhibit 98: Market pricing for the RBA and RBNZ August meetings have maintained a relatively stable spread in recent weeks



Source: Bloomberg, Morgan Stanley Research

Exhibit 99: AUD is both low carry and high beta



Source: Bloomberg, Macrobond, Morgan Stanley Research

We also continue to recommend short AUD/USD positions for reasons outlined here.

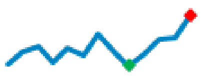
As our rates strategy colleagues discuss in United States | Bank stresses in focus again, we see continued risks to sentiment stemming from the US banking sector. Short AUD positions are a particularly efficient way to position for a challenging risk outlook, given AUD's high correlation to risk demand (proxied by the S&P 500) and relatively low carry (Exhibit 99).

- **Trade idea: Maintain Short AUD/USD at 0.6690 with a target of 0.6200 and stop of 0.7000**
- **Trade idea: Maintain Pay August RBA at 3.67**
- **Trade idea: Maintain Receive August RBNZ at 5.51**

G10 | Currency Summary

USD

2.3%



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

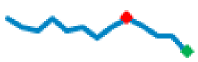
Watch: ISM Mfg, PMI Revisions, ISM Services, FOMC Meeting, NFP

DXY **Support:** 100.75/101.00, 99.75, 97.25/75, **Resistance:** 102.75, 103.25/50, 105.00, 105.75, 107.00

We remain bullish on the USD versus EUR, AUD, and CAD. We think investors remain complacent about risks around the 'soft landing' narrative. Media reports relating to a US regional bank potentially liquidating assets is a reminder that US data and credit conditions remain a risk to the local and global outlook. Investors remain modestly short USD, most noticeably in European currencies, suggesting scope for a pullback as investors reprice the narrative. A noticeable drop in employment growth this week would likely further fuel USD gains against risk currencies.

EUR

-2.5%



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

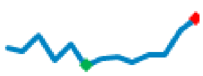
Watch: CPI, Unemployment Rate, PMIs, ECB Decision, Retail Sales

EUR/USD **Support:** 1.0900, 1.0825, 1.0750, 1.0550, 1.0450, **Resistance:** 1.1075, 1.1150/1.1200, 1.1500

We remain bearish on EUR/USD. Investors continue to argue that the risks of a US slowdown impacting Europe are minimal, a position we disagree with. Financial conditions are a key transmission mechanism between softer US data and the RoW, and we think a repricing of a higher risk of a global 'hard landing' is likely to weigh on EUR/USD, particularly with the market positioning mostly long European currencies. The upcoming ECB meeting and CPI data release will be important short-term EUR catalysts.

JPY

0.9%



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

Watch: Activity into Golden Week Holidays

USD/JPY **Support:** 132.25, 131.00, 130.00, 128.50, 127.25, **Resistance:** 135.00, 136.75, 137.75/138.00

We remain bullish view for JPY against USD. While BoJ April MPM maintained the status quo, we don't expect such a dovish BoJ outcome to become a significant catalyst for USD/JPY, given little room for the BoJ to ease further. We believe that any meaningful catalysts for USD/JPY would come from the Fed. The renewed US regional banking concerns and the subsequent cautious approach from the Fed may lead to deeper Fed rate-cut pricing, and USD/JPY could go lower via a policy convergence narrative.

GBP

-3.1%

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

Watch: House Prices, PMI Revisions, Mortgage Approvals

GBP/USD **Support:** 1.2350, 1.2200, 1.2150, 1.2050, 1.1800/25, **Resistance:** 1.2475, 1.2600/50, 1.2975/1.3000, 1.3300

We are neutral on GBP/USD but see risks skewed to the downside versus both the USD and EUR. Risk sentiment remains a key driver of the currency and a softening in the global narrative is likely to push GBP lower alongside risk appetite. Still-elevated inflation keeping Bank Rate higher for longer may further weaken the growth outlook, particularly as more mortgage rates reset at higher levels.

CHF

1.9%

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

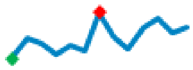
Watch: PMI, Unemployment, CPI

EUR/CHF **Support:** 0.9725, 0.9675, 0.9575, 0.9450, **Resistance:** 0.9875, 1.0025/75, 1.0150, 1.0225, 1.0475

We remain neutral on EUR/CHF overall as we await clarity on the SNB's reaction function and market interpretations of recent financial events. We think investors are watching the level of bank deposits in the system closely to try to gauge how recent events have impacted Switzerland's place as a global center for finance and wealth management. A pivot of physical cash back into the banking system in response to now-positive rates may support bank deposit levels, in turn supporting CHF if investors view that as a positive sign for Switzerland's future as a financial services hub.

CAD

2.0%



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

Watch: Employment Report, PMI

USD/CAD **Support:** 1.3300, 1.3200/25/50/75, 1.2975, 1.2900, **Resistance:** 1.3650, 1.3800/50, 1.3975, 1.4175, 1.4250

We continue to recommend long USD/CAD with a target of 1.385. We see room for markets to price in further easing from the BoC this year on the basis of spillover risks from a more meaningful slowdown in the US, lingering regional banking stresses, and the still unknown implications of tighter credit conditions. Although the BoC's Summary of Deliberations mentioned that "cutting rates later this year did not seem to be the most likely scenario," the Governing Council acknowledged that the "risk of a sharper slowdown" remains. Market repricing of a higher probability of a US "hard landing", and the spillovers to the RoW this would entail, should also continue to weigh on oil prices and demand, pushing, all else equal, USD/CAD higher.

AUD

-3.5%

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

Watch: RBA Rates Decision, Retail Sales

AUD/USD **Support:** 0.6625, 0.6550/75, 0.6400, 0.6300, **Resistance:** 0.6800, 0.6900, 0.7000, 0.7150, 0.7275

We continue to recommend short AUD/USD positions. We also recommend paying the August RBA meeting positions and receiving the August RBNZ meeting. The details of recent CPI and employment data may lead the RBA to take a (surprisingly) hawkish tone this week. As our rates strategy colleagues discuss in United States | Bank stresses in focus again, we see continued risks to risk sentiment stemming from the US regional banking sector. Short AUD positions are a particularly efficient way to position for a challenging risk outlook, given AUD's high correlation to risk demand (proxied by the S&P 500) and relatively low carry.

NZD

-1.3%

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

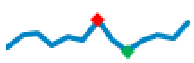
Watch: Employment Report

AUD/NZD **Support:** 1.0800, 1.0675, 1.0600, 1.0475/1.0500, **Resistance:** 1.0950, 1.1075, 1.1175, 1.1400, 1.1450

Earlier this month, the RBNZ opened the door to a pause by noting that its objective in hiking 50bp was to "maintain the current lending rates" – raising the prospect that its large hike would reduce the urgency to tighten further. That readiness to pause rate hikes contrasts with market pricing implying roughly 40bp of hikes to come. As these implied rate hikes are reduced, we expect NZD to underperform. We prefer short AUD/USD to short NZD/USD positions both because of the more attractive carry and because it better hedges our August RBA payer / RBNZ receiver trade recommendation.

SEK

2.4%



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

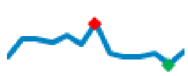
Watch: PMI

EUR/SEK **Support:** 11.24, 11.09, 11.00, 10.96, 10.84, **Resistance:** 11.44, 11.63, 11.79, 12.02

We turn our skew on SEK back to neutral in light of the Riksbank meeting. The bank hiked rates 50bp as expected and guided toward another 25bp by September, and their comments on the currency suggest they are not immediately and actively concerned with the current level. With less market-perceived SEK support from policymakers, a market repricing of 'hard landing' risks may push USD/SEK even higher.

NOK

0.7%



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

Watch: Norges Bank Decision, IP

NOK/SEK **Support:** 0.9700, 0.9600, 0.9475, 0.9300, **Resistance:** 0.9900, 1.0000, 1.0150, 10350, 1.0475

We remain neutral on NOK for now. Higher equity and oil prices have failed to generate NOK strength as many investors (and us) expected it to, and short-term correlations between NOK and many macro indicators appear to have broken down, suggesting that non-market-related factors may be increasingly important currency drivers. With the NOK-TWI at its lowest levels since 2020, we look for some stability before re-assessing when we might consider buying. Norges Bank rhetoric on currency weakness will be closely watched and explicit displeasure with NOK softness may prove an important buying catalyst for investors.

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

In our Inflation Strategist this week, we recommended entering 20y iota wideners. Our view is driven by the potential for TIPS liquidity premiums to increase vs. UST, on the back of increased uncertainty around financial stability, and increased cut pricing. Our preferred expression is short Feb44 BE vs. long a matched maturity inflation swap.

We discuss the relationship between energy commodities prices and CPI electricity. We revamp our seasonality-based market-estimate of Energy CPI to account for a recent breakdown in historical relationships. Our new model outperforms our original model in predictive power.

The US Treasury and Federal Reserve released its annual TIC holdings data. These data suggest that foreign portfolio holdings of TIPS have gone down in value. Further analysis is needed to gauge whether this is flow or price driven, however.

Euro area

The main focus has been on April CPIs across euro area countries. Overall, the readings were mixed as French CPI surprised to the upside, while Spanish and German CPI were softer than expected. Next week's ECB meeting and the EA CPI reading will be the main market drivers in the eurolinker space.
With regards to supply, the Spanish Tesoro plans to tap €0.25-0.75bn notional of the SPGBei27 (€0.15-0.5m/bp DV01) on Thursday May 4, while the market still expects a potential new 15-20-year OATi syndication likely in May (we think a new March 2043 OATi would be the best candidate). With regards to trades we maintain our structural long OATei31 position.

United Kingdom

In the UK, the past week has been light on the data front, while euro area CPIs have been relevant for investors in terms of assessing the future path of UK inflation. Next week instead will probably be dominated by the Fed and ECB meetings, before the focus shifts to the BoE meeting scheduled for May 11, 2023. Trade-wise we maintain our long IL28 position.

United States | Long 20y iota

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	Directional	Relative Value
VIEW	**BULLISH LONG-TERM INFLATION**	**\WIDENING 20Y IOTAS**
Remarks	Markets underestimate inflation persistence	Financial stability could increase 20y TIPS liquidity premium
Trades	Long 10y BE vs. long 2y UST	Long Feb44 iota (widener)

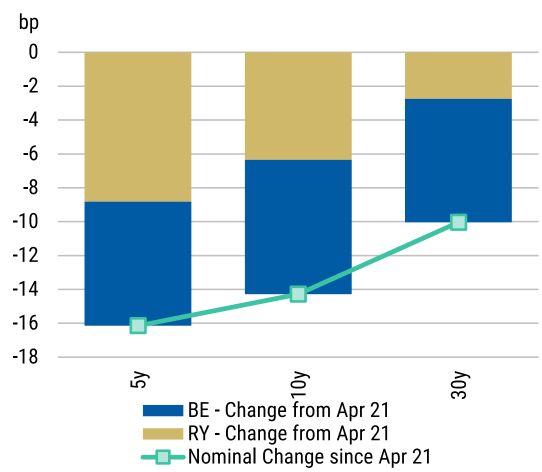
Part of this commentary was previously published here.

TIPS rallied on the week, led by the front of the curve. Price action was nominal driven, however, as the breakeven curve steepened (see Exhibit 100). The move on Friday was notable, with Feb40s through Feb50s all down 7-10bp.

Sub-1y fixings continued last week's trend of falling uniformly, with the exception of the Apr23 release, which is currently pointing to a strong 0.41% SA print. Year end is priced at the 3.12% level, roughly 10bp lower than last week.

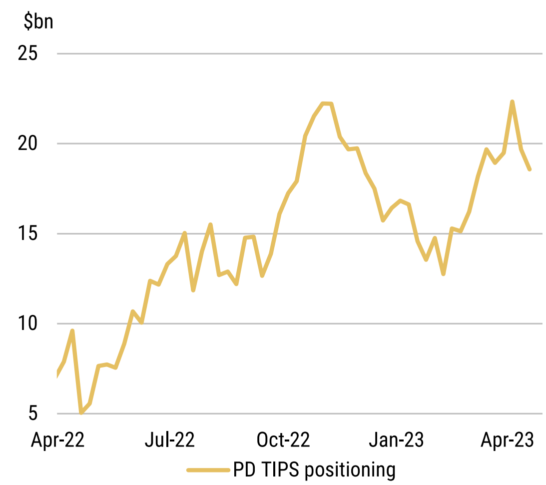
In the swap space, the curve bear steepened in line with cash. Iota spreads tightened into the week before widening following bank earning data midweek, and then again following Friday's BE curve weakness.

Exhibit 100: Moves in UST, RY, and BE w/w



Source: Bloomberg, Morgan Stanley Research

Exhibit 101: Primary dealers net longs ticked down last week



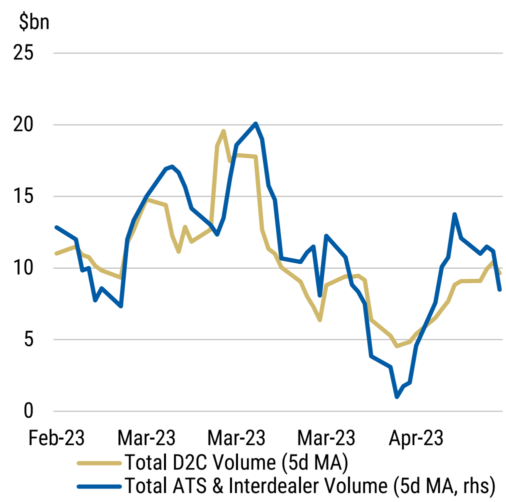
Source: Bloomberg, Morgan Stanley Research

Primary dealer positioning data through April 19 saw PD net longs continue to tick down, though they remain elevated (see Exhibit 101). Adjusting for duration, the data suggests that non-PD participants put on flattening risk. ETF flows, our preferred proxy for retail participation, continue to see outflows on a 3m rolling basis.

TIPS TRACE data suggests further improvement in liquidity, with volumes up off early April's lows (see Exhibit 102). Trading frequency has inflected downward, however, leading trade sizes to spike (see Exhibit 103). Trading activity remains concentrated in the front end of the curve (<5y volumes at the 83% percentile over 2m look back vs. >10y volumes at the 31% percentile). As a result, total risk added in CTII10y DV01 equivalents remains below early March levels.

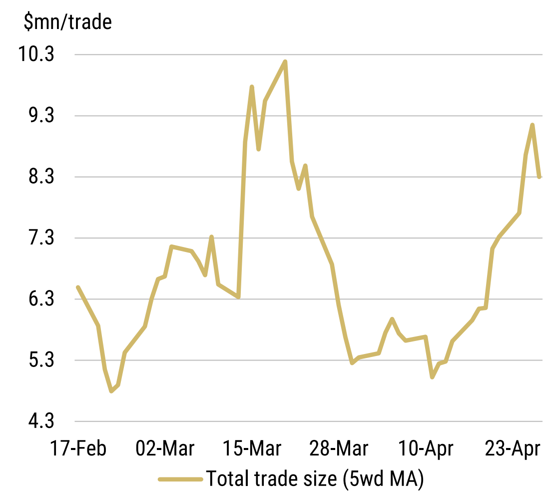
Overall, we think risk parameters remain strict amid increased macro uncertainty. However, a non-trivial amount could be attributed to month-end rebalancing flows, with $21bn of the CTII5 rolling into the index, and $38bn of the TII 0.5% Apr24s rolling out of the index. This will result in large 0.276y and 0.197y extensions for the 0-5y and 1-5y TIPS indexes, per our estimates, and thus increased front-end activity.

Exhibit 102: TIPS volumes are moving upward...



Source: FINRA, Bloomberg, Morgan Stanley

Exhibit 103: ...largely as a result of increased trade count



Source: FINRA, Bloomberg, Morgan Stanley

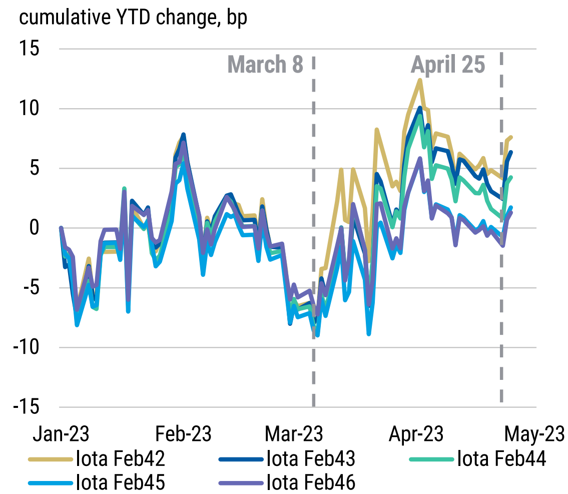
Enter long 20y iota

On Thursday, we entered 20y iota wideners, via shorting the Feb44 BE vs. long a matched maturity inflation swap. We believe investors stand to benefit from continued increases in the illiquidity premium of TIPS vs. UST, amid (1) uncertainty in the financial system leading TIPS liquidity premiums to increase, and (2) a rush toward long duration, leading UST liquidity premiums to decrease.

The liquidity premium for 20y TIPS has been highly responsive to incoming information regarding financial stability (see Exhibit 104). When the first signs of banking system stress emerged on March 8, 20y iota spreads widened. Signs of weakness in regional bank earnings led iotas to widen further in the last week of April. Given our view that the market is underpricing financial stability risks, this suggests iotas stand to widen further.

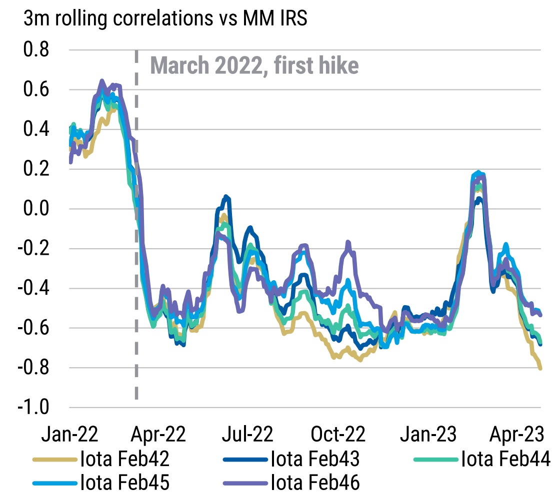
Since the beginning of the hiking cycle, 20y iota spreads have co-moved negatively to nominal rates. Exhibit 105 shows that post-March 2022, the correlation between matched-matured interest rate swaps and 20y iotas has been negative. This likely comes as nominal rates premia decrease more quickly than TIPS premia, given the relative liquidities of the two markets. Given our bullish duration view, we think iotas stand to widen as further cuts are priced.

Exhibit 104: 20y iotas widen amid signs of banking stress



Source: Morgan Stanley Research

Exhibit 105: 20y iotas have been negatively correlated to rates since Mar2022

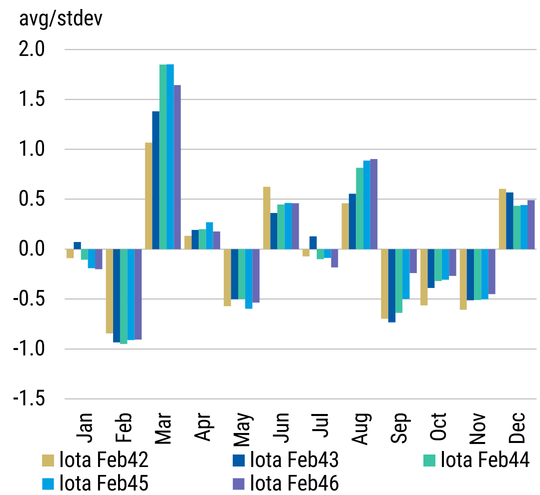


Source: Bloomberg, Morgan Stanley Research

From a technical perspective, we note that 20y iota candidates have displayed no clear May seasonality over the past 7y. Using a classical decomposition, we find that, on average, 20y iotas have tightened 1.8-2.0bp. The spread on this number is quite wide, however, as shown by Exhibit 106. Changing to medians, this number drops to a ~3bp tightening, again not concerning given the spread. These results are robust to excluding volatile 2020 Covid data.

Finally, from a carry perspective, we are entering into negative carry season for BEs. Per our estimates, 20y BEs will be negative to the tune of 3-4bp over the coming 90d (see Exhibit 107). This is a tailwind for the trade, given that iota wideners require shorting a BE.

Exhibit 106: Average monthly change divided by standard deviation, since 2016



Source: Morgan Stanley Research

Exhibit 107: 20y BE carry profiles are negative for next 3m

TIPS	Comparator	1m carry	2m carry	3m carry
TII 1 02/15/46	T 2 1/2 02/15/46	-0.9	-2.0	-3.1
TII 0 3/4 02/15/45	T 2 1/2 02/15/45	-0.9	-2.0	-3.2
TII 1 3/8 02/15/44	T 3 5/8 02/15/44	-1.0	-2.3	-3.6
TII 0 5/8 02/15/43	T 3 1/8 02/15/43	-1.0	-2.3	-3.6
TII 0 3/4 02/15/42	T 3 1/8 02/15/42	-1.1	-2.5	-3.9

Source: Bloomberg, Morgan Stanley Research
Note: Assumed 1m, 2m, and 3m financing rates of 5%, 5.05%, 5.04%

We recommend constructing the trade via the Feb44 BE iota. We select this point by balancing carry considerations (middle of the pack, as shown in Exhibit 107) and yield pick-up. The Feb44 point is 1 z-score above its YTD average, providing a middle point in terms of yield pick-up versus the surrounding points.

The primary risks to this trade are (1) the fading of rate cuts priced in 2023, and (2) strong signs that banking stress is in the rearview mirror. We price the Feb44 BE and matched maturity swap at 2.35% and 2.46%, respectively, implying an entry level of 11bp. We set an initial target of 21bp, and a stop at 0bp.

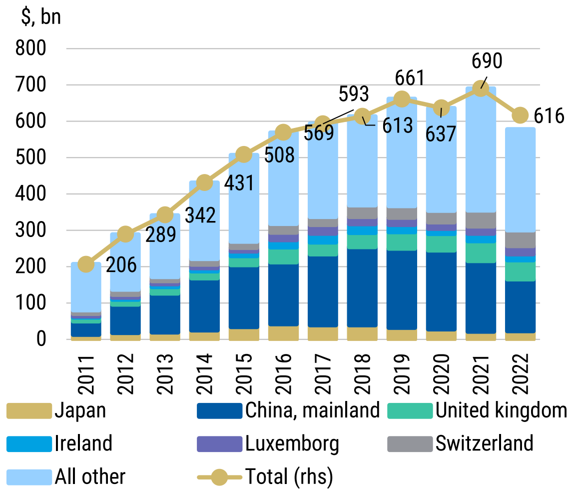
- **Trade idea: Maintain long Feb44 iota at 11bp, target 21bp, stop 0bp**
- **Trade idea: Maintain long 10y BE vs. long 2y UST**

Got TIPS?

Today at 4pm, the US Treasury and Federal Reserve released its annual Foreign Portfolio Holdings of US Securities. These data provide insight into foreign portfolios holdings of treasuries, TIPS, and equities (amongst other things).

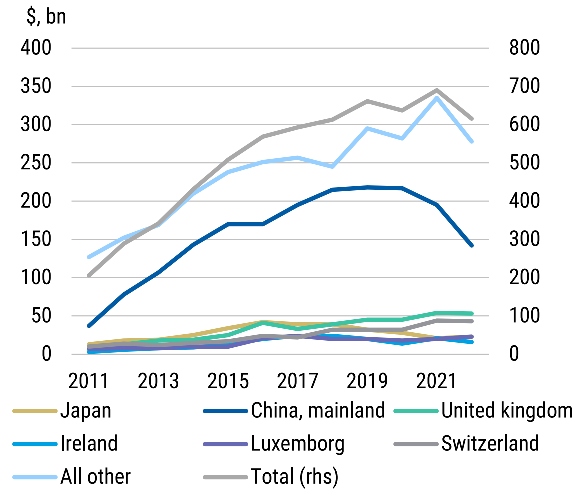
On the TIPS side, foreign holdings continued with the decline observed over the past few years. China's TIPS portfolio, the largest foreign holder, decreased by roughly $50bn. Luxemborg and Japan were the two notable outliers, with portfolio values increasing.

Exhibit 108: Aggregate foreign TIPS holdings



Source: US Treasury, Federal Reserve, Morgan Stanley Research

Exhibit 109: TIPS holdings broken down by country



Source: US Treasury, Federal Reserve, Morgan Stanley Research

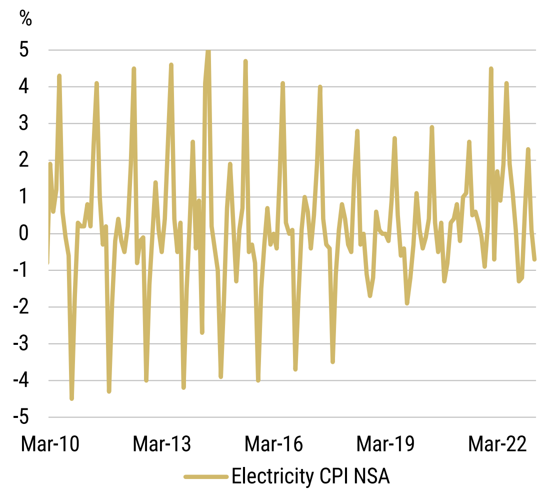
Note that TIC data are reported as market value. This implies that the market value of foreign portfolio holdings was due to come down, as the Federal Reserve began its hiking cycle. We will pursue a market-price adjusted series in future reports.

Revisiting electricity seasonality

We previously introduced our market-based CPI energy model. This model uses futures prices and auto-regressive components to derive a market-based estimate of energy CPI. This can be used in conjunction with the fixings market to estimate market-based core CPI.

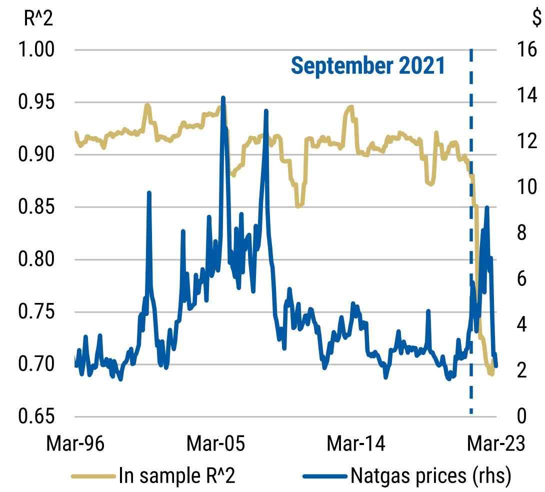
A central premise to our model is that NSA electricity costs are almost entirely seasonal. In other words, the CPI electricity value observed in March 2023 will be well approximated by the average March electricity CPI over a multi-year look back window. This can be seen in the predictable pattern of the series in Exhibit 110.

Exhibit 110: Plot of electricity CPI over the past few months



Source: Bloomberg, Morgan Stanley Research

Exhibit 111: R^2 of original model vs. natgas price, since 1996



Source: Bloomberg, Morgan Stanley Research

Over the past 1.5y, however, this relationship has broken down. Exhibit 111 shows that the R^2 of our model has dropped significantly, more so than during other periods of high energy commodities' vol. The combination of the 1H21 UK natgas crisis, followed by 1H22 geopolitical stability in 1H22, has resulted in a large R^2 drop.

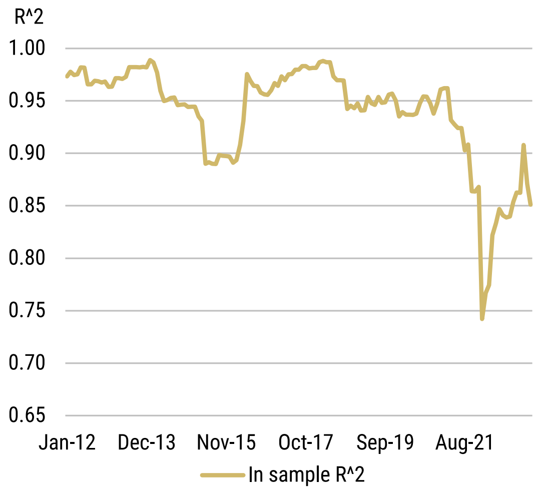
We introduce the Energy Information Administration's (EIA) short-term energy outlook (STEO) electricity price series into our model, to amend this situation. STEO data are released at a monthly frequency, and provide average electricity costs across US electricity markets. The EIA also includes a multi-year electricity forecast path as part of the release. We use this series to extend a regression-based model into the future.

A model that relies on seasonality and the EIA STEO series does not display our original models' drop-off in R^2, actually rebounding in Jan22 (see Exhibit 112). Furthermore, the EIA STEO regression coefficient is readily interpretable. It is positive, and becomes larger and more statistically significant during periods of high energy commodities prices (see Exhibit 113).

In other words, the STEO data becomes meaningful precisely when energy commodities prices are elevated, and seasonality is no longer sufficient.

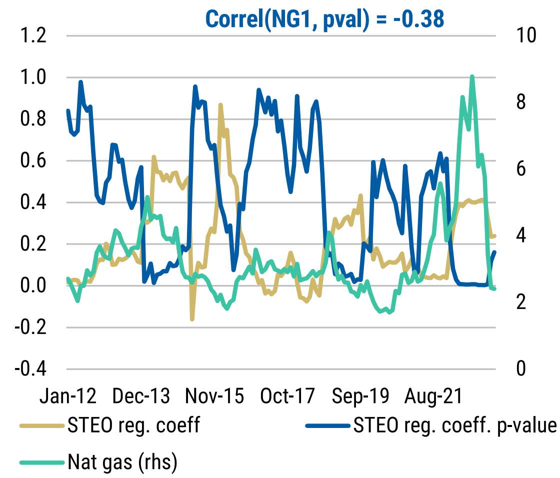
A natural question readers might have is, "why do we not include energy commodities prices in the model?" After all, if the hypothesis is that energy commodities prices are driving the breakdown in the seasonal-only model, it would be logical to assume that including them in the model would solve the issue.

Exhibit 112: In sample R^2 of STEO model since 1996



Source: EIA, Bloomberg, Morgan Stanley Research

Exhibit 113: STEO series becomes useful when energy commodities prices spiked



Source: EIA, Bloomberg, Morgan Stanley Research

Empirically, including energy commodities in the model does not solve the problem (see Exhibit 114 and Exhibit 115). From an explanatory power perspective, adding, e.g., natgas, does not improve our original model's R^2. Furthermore, natural gas' regression coefficient is near zero and generally not statistically significant. This analysis is robust to various energy series, and regressor lags.

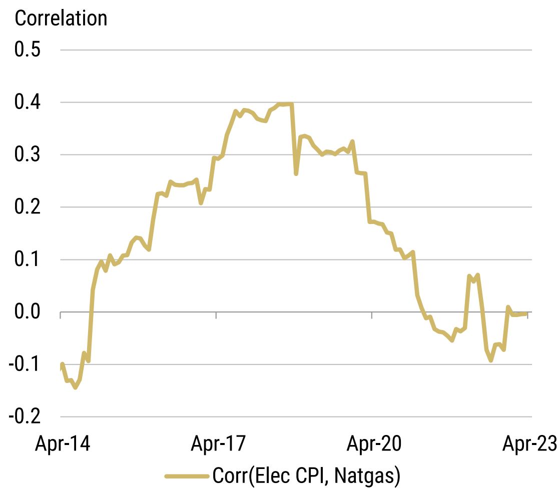
To understand why this might be, it is important to understand how electricity is generated and priced in the US. At a high level, electricity markets can be split into three phases:

1. **Generation:** Power plants converting fuels (uranium, natgas, renewables) into electricity
2. **Transmission:** Electricity is delivered from power plants to local distribution power lines
3. **Distribution:** Electricity is delivered from local power lines to end-users

The generation phase, at a state-level, can be either regulated or unregulated. In regulated states, generators fully pass energy commodities price increases through to end users, upon their regulators's approval. In non-regulated states, producers have the discretion to pass through energy commodities price changes as they deem appropriate.

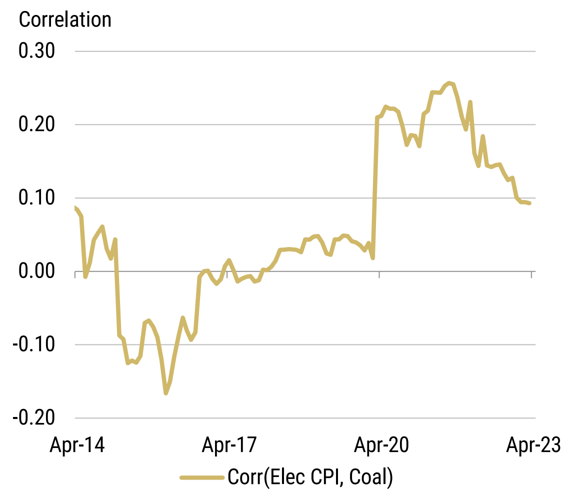
The transmission and distribution phases are virtually always regulated, since they are viewed as natural monopolies. Any changes in end-user prices due to transmission and distribution need to be approved by regulators, regardless of a state's generation regulation.

Exhibit 114: Link between natgas and electricity CPI is unstable...



Source: Bloomberg, Morgan Stanley Research

Exhibit 115: ...and a similar store holds for coal



Source: Bloomberg, Morgan Stanley Research

Putting everything together, while generation allows for a pass-through of commodities prices, regulation in transmission and distribution processes render the relationship between electricity prices and commodities prices non-linear, and hard to model readily.

Short-Duration Strategy

United States

"Red zone" to narrow, maintain long 2-month T-bills vs. OIS. For T-bills in the "red zone", there was little week-over-week change with maturities in July and August showing the most noticeable kink. This week, the TGA continued to track in line with our expectations, and we keep early August as our estimate for the X-date. In addition, we expect the "red zone" to narrow over the coming weeks as investors get updates from the Treasury. This will come via the latest financing estimates for 2Q and 3Q released Monday, Wednesday's refunding announcement, April's MSPD, and an updated letter from Secretary Yellen to Congress on the DISP. A prolonged debt limit episode until August will likely keep T-bill supply back loaded in 2H23. We maintain our long 2-month (second half of June) T-bills vs. OIS trade at -25bp.

MMFs see positive inflows this week. We have highlighted that seasonality due to tax payments likely explained some of the moderation in MMF inflows over the past weeks. With the tax deadline (4/18) in the rearview mirror, MMF inflows have picked up again with daily Crane Data as of 4/27 showing 6 consecutive days of increases. Moving forward, we do not observe any clear seasonal headwinds. In particular, MMF AUM tends to increase during the summer and into year-end. This could lend further support to further AUM growth in addition to the other three drivers that we highlighted last week (another 25bp hike next week, further front-end curve inversion, and where we are in the business cycle).

Reserves likely to increase moving forward given higher Fed loans and lower TGA. Developments this week suggest that the FDIC's liquidity needs are likely to increase in the coming days. Given that the FDIC has access to the Fed's balance sheet, this is likely to lead to an increase in reserves. So far, the FDIC has withdrawn $34bn from the TGA and has $170bn in bridge loans outstanding with the Fed. The actual realized losses to the DIF are estimated to be ~$23bn, and we continue to expect for the FDIC to be able cover all deposits in receivership as the Fed is able to provide bridge liquidity. We will also continue to monitor closely the FDIC's liquidity needs due to its potential impact on the TGA.

Fed H.4.1 and H.8: greater liquidity needs and higher funding costs. In this week's H.4.1 release total loans saw a second consecutive increase after 5 weeks of gradual declines. Bridge lending to the FDIC decreased by $2.2bn while primary credit (discount window) increased by $3.9bn. The BTFP increased by $7.3bn to a new high of $81bn. In the H.8 release as of 4/19, the distribution of liabilities continues to skew further towards borrowings led by small banks.

United States | The show is not over yet

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"Red zone" to narrow in coming weeks

The debt limit continues to be top of mind for front-end investors. As shown in Exhibit 116, T-bills in the "red zone" continue to underperform relative to overnight index swaps (OIS). This continues to suggest both a high degree of risk aversion around the debt limit and uncertainty around the X-date.

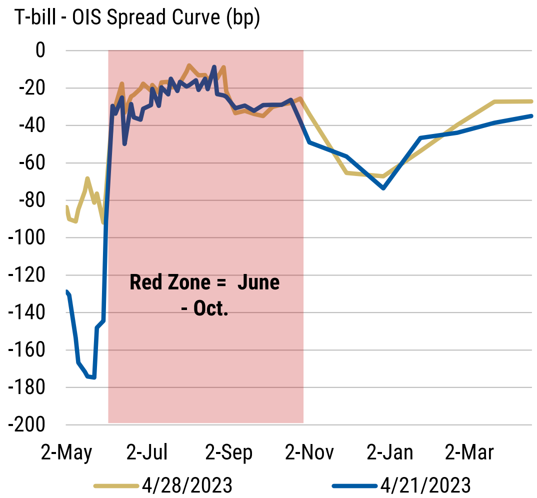
This week, 1-month T-bills cheapened significantly vs. OIS. In our view, this was mainly driven by the announcement of $85bn in cash management bills. Also, the extreme rich levels likely from last week likely brought forward some sellers looking to capture mark-to-market gains in off-the-run bills in the 1-month sector. For T-bills in the "red zone", there was little week-over-week change with T-bills in July and August still showing the most noticeable kink.

At the same time, the Daily Treasury Statement (DTS) releases this week continued to track in line with our expectations. As of 4/27, the TGA was at $294bn and is on track to end April slightly above our initial $300bn estimate (see here) given $21bn of net coupon settlements on 4/28 (we forecast $306bn).

In addition, total receipts for April are tracking slightly above our expectations, with total tax receipts coming from individual non-withheld, individual withheld, and corporate income at $665bn month-to-date (as of 4/27). In our view, this has decreased the chance of an early June X-date below 10%.

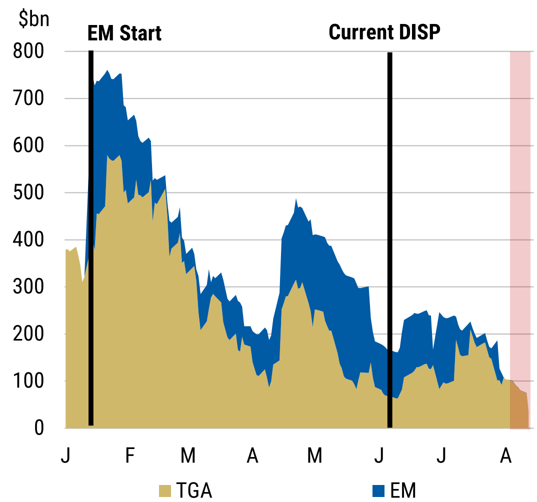
In Exhibit 117, we show our forecast for the TGA and amount of extraordinary measures (EM) available after incorporating this week's data. As shown, we continue to see enough cash on hand and room available from EM to get through the first half of June, and we maintain our estimate for the X-date in early August.

Exhibit 116: T-bills vs. OIS spread curve



Source: Bloomberg, Morgan Stanley Research

Exhibit 117: Forecast of TGA and extraordinary measures available



Source: US Treasury, Morgan Stanley Research

Given the high degree of uncertainty inherent in the timing and magnitude of outlays, we test our base case for the TGA + EM by $75bn in Exhibit 118. We show that the probability of a June X-date remains low even in the down $75bn scenario. In the first two weeks of August, we expect outlays to quickly deplete the amount of room left under the current debt limit.

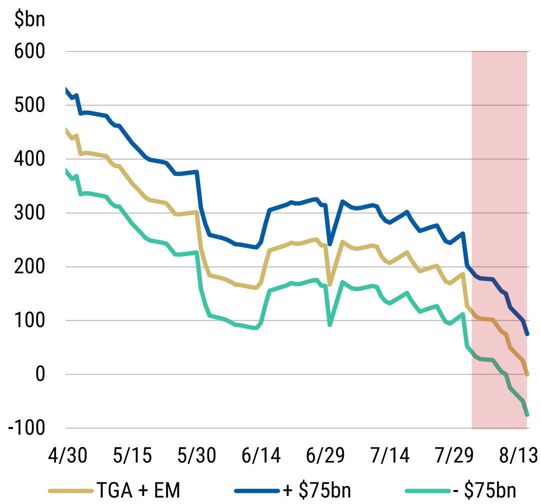
In addition, we **expect the "red zone" to narrow over the coming weeks** as investors get updates from the Treasury. In particular, we look forward to the latest financing estimates for 2Q and 3Q released on Monday (5/1) that should provide some color on the Treasury's expectations for net outlays in May and June. In our forecast, we are already incorporating the latest net borrowing estimate for CY2023 ($1.463tr) from our US economists and do not expect any significant deviations vs. our expectations.

Another source of uncertainty is the lack of clarity on the amount of EM left on a daily basis. Hence, the upcoming April Monthly Statement of Public Debt (MSPD) will help us refine our forecast in coming weeks. The MSPD will allow us to confirm the balance of the G-fund and ESF, as well as the total change in intra-government debt for the month. In our latest estimate, we see a ~$150bn of room as of April month-end mainly driven by $126bn of T-bill paydowns.

Also, we are looking forward to a letter from Secretary Yellen to Congress on the debt issuance suspension period (DISP) that is set to expire on 6/5 (will be posted here). As shown in Exhibit 117, we expect the Treasury to be able to extend the current DISP. Timing of the announcement remains uncertain but is likely to come in the next 1-2 weeks, particularly after Wednesday's refunding and FOMC meeting.

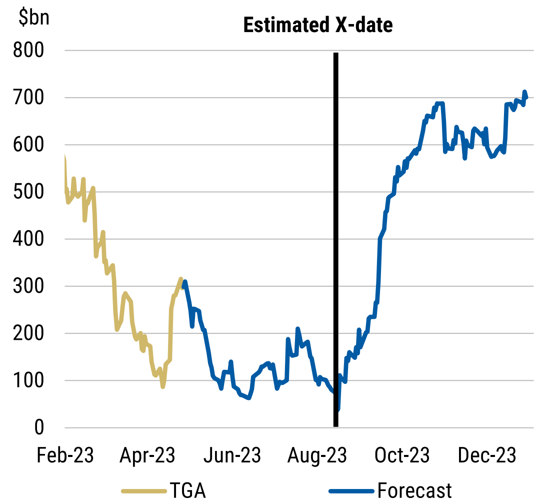
We maintain our **long 2-month (second half of June) T-bills vs. OIS trade at -25bp**. We also specify that we see the most value in T-bills maturing in the third and fourth week of June. Further clarity around the "red zone" should help these maturities narrow the gap vs. 1-month T-bills towards our target of -60bp in the next 1-2 weeks.

Exhibit 118: Forecast of TGA and extraordinary measures available



Source: Morgan Stanley Research

Exhibit 119: TGA forecast for 2023



Source: US Treasury, Morgan Stanley Research

What happens next?

Investors also continue to focus on the "post-debt limit" world given that the Treasury will likely bring the TGA back in line with its cash management standards (5-day of outflows). In Exhibit 119, we show our forecast for the TGA in 2023 assuming a year-end target of $700bn. Given that this increase will likely come from significant T-bill issuance, we continue to expect T-bill supply to remain back-loaded this year (Exhibit 120).

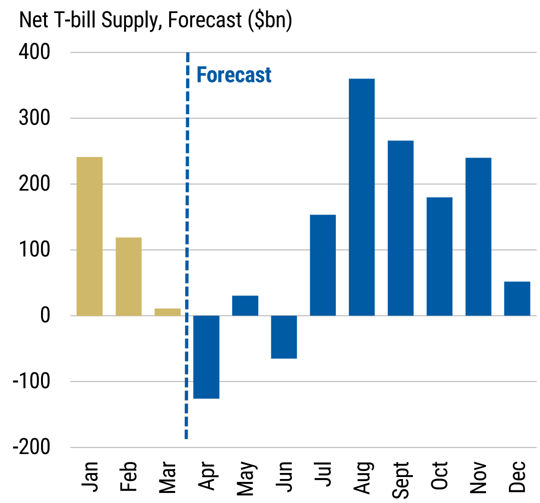
In the primary dealer agenda for Wednesday's refunding (see here), the Treasury is starting to gather information on the market's ability to absorb substantial T-bill supply once the debt limit is suspended or lifted. This suggests that the TGA target and pace/magnitude of T-bill issuance later this year could be lower relative to our forecast.

As we discuss in our refunding preview (see United States | Bank stresses in focus again), the Treasury is also likely to consider increases to coupon auctions later this year. This would also lead us to revise our T-bill supply forecast marginally lower. Regardless, the amount of T-bill supply will likely remain substantial and lead to higher repo rates given more collateral in the market and a decline in Reserves and the RRP.

In Exhibit 121, we show that the SOFR/FF basis has tightened week-over-week (SOFR higher vs. FF). This could reflect increased concerns around higher funding rates post-debt limit. At the same time, we recognize that price action this week could have been driven by the liquidity premium of 1m fed funds (FF) contracts relative to 1m SOFR (SER) contracts as the market priced in more cuts. This, in addition to repo rates moderating post-month-end, could lead to a reversal in the coming days.

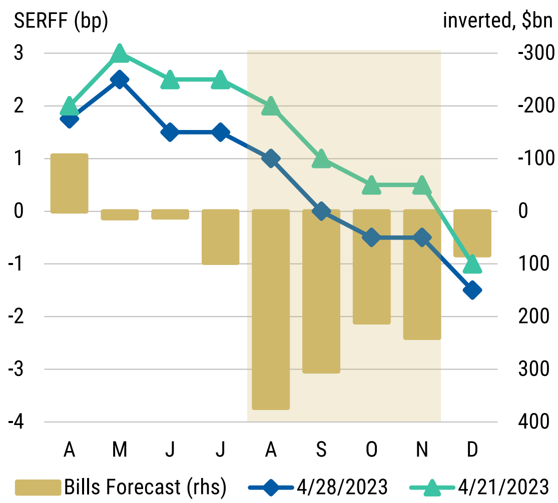
As we discussed last week, market pricing for SOFR/FF (based on SERFF future contract spreads) will continue to be biased lower (meaning tighter SOFR/FF, or SOFR increasing relative to FF) as we approach the X-date, particularly for the months in which we expect elevated T-bill supply.

Exhibit 120: Net T-bill supply forecast



Source: US Treasury, Morgan Stanley Research

Exhibit 121: 1m SOFR/FF futures spread



Source: Bloomberg, Morgan Stanley Research

MMFs see further inflows

We have highlighted that seasonality due to tax payments was likely to explain some of the moderation in MMF inflows over the past weeks. With the tax deadline (4/18) in the rearview mirror, MMF inflows have picked up again with daily Crane Data as of 4/27 showing 6 consecutive days of increases.

In Exhibit 122, we show that total MMF AUM increased by $42bn WoW on 4/27. As shown in Exhibit 123, total MMF AUM reached a new record of $5.687tr this week. Since 3/10, total AUM has increased by $419bn (85% of the YTD increase).

Exhibit 122: Change in MMF AUM

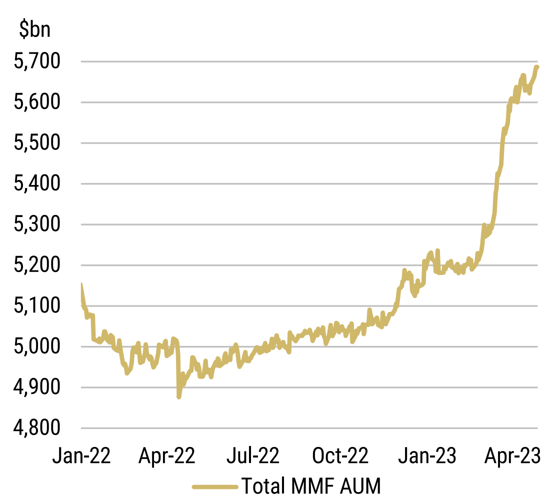
As of 4/27

$bn	AUM	WoW	vs. 3/10	QTD	1Q23	YTD
Total	**5,687**	**42**	**396**	**77**	**419**	**496**
Inst. Govt/Tsy	3,105	38	311	18	253	271
Inst. Prime	657	(1)	18	39	(37)	2
Retail Govt/Tsy	1,295	3	90	15	117	132
Retail Prime	517	4	(14)	9	86	96
Tax Exempt	113	(2)	(8)	(5)	0	(5)

$bn	AUM	WoW	vs. 3/10	QTD	1Q23	YTD
Total	**5,687**	**42**	**396**	**77**	**419**	**496**
Institutional	3,762	38	329	57	215	273
Retail	1,812	7	76	25	203	228
Tax Exempt	113	(2)	(8)	(5)	0	(5)

Source: Crane Data, Morgan Stanley Research

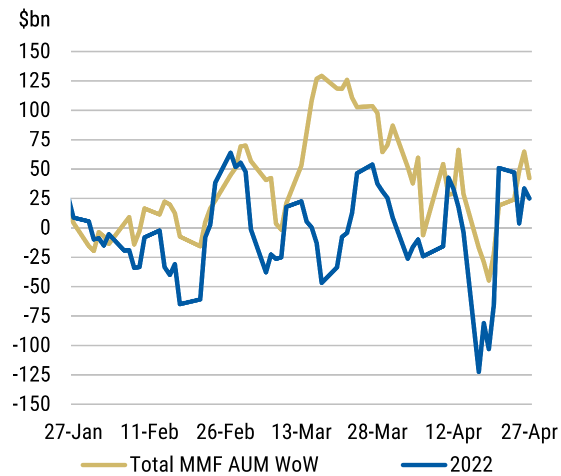
Exhibit 123: Total MMF AUM over the past year



Source: Crane Data, Morgan Stanley Research

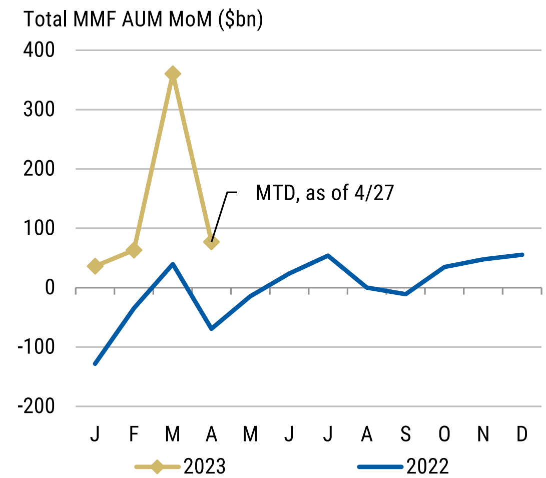
In Exhibit 124, we show that the WoW change in MMF AUM continues to be impacted by seasonality due to tax payments. Moving forward, we do not observe any clear seasonal headwinds (Exhibit 125). In particular, MMF AUM tends to increase during the summer and into year-end. This could lend further support to further AUM growth.

Exhibit 124: WoW change in MMF AUM vs. 2022



Source: Crane Data, Morgan Stanley Research

Exhibit 125: MoM change in MMF AUM



Source: Crane Data, Morgan Stanley Research

In addition, we continue highlight that there are several drivers that could keep MMF AUM trending higher. First, the market is still pricing ~80%+ of a 25bp hike at the upcoming May FOMC meeting. This will push the RRP rate to 5.05%, allowing MMF yields to continue their climb higher. Second, further inversion of the T-bill curve as we approach the X-date and the market prices in more cuts could continue to make MMFs increasingly attractive.

Third, we observe that MMF AUM tends to increase in a late business cycle and during recessions with sustained declines only coming after the recession ends. With these considerations, we do not see a clear catalyst for lower MMF AUM in the near term (see Waiting For A Sign? for more).

Reserves likely to increase next week

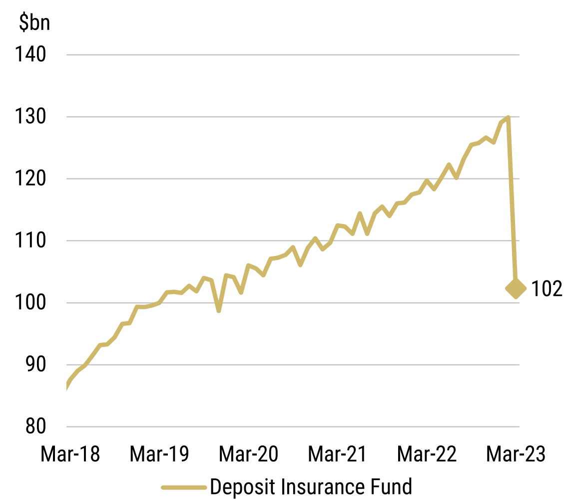
Developments this week suggest that the FDIC's liquidity needs are likely to increase in the coming days. Given that the FDIC has access to the Fed's balance sheet, this is likely to be reflected via an increase in "other credit" in next week's H.4.1 release. Also, we would expect for some of the primary credit and BTFP to shift into "other credit" as well.

This coordinated response from the Federal Reserve, US Treasury, and FDIC put in place will continue to allow the Deposit Insurance Fund (DIF) to guarantee all depositors (both insured and uninsured) of banks in receivership. In March, the DIF declined by ~21% to $102bn (Exhibit 126), and we estimate that it is sitting at $95bn as of 4/26.

So far, the FDIC has withdrawn $34bn from the TGA (Exhibit 127) and has $170bn in bridge loans outstanding with the Fed. The actual realized losses to the DIF are estimated to be ~$23bn, and we continue to expect for the FDIC to be able cover all deposits in receivership as the Fed is able to provide bridge liquidity.

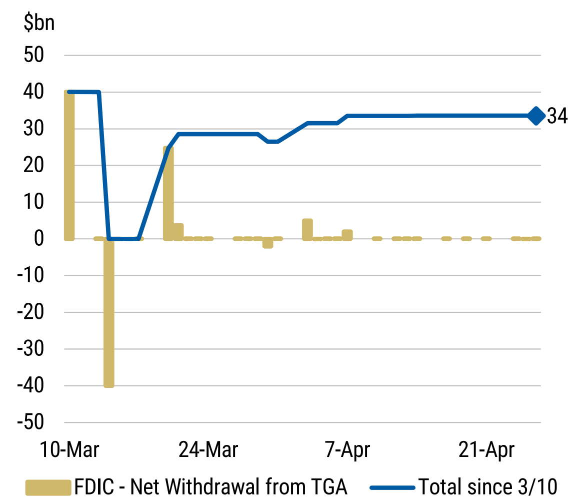
We will also continue to monitor closely the FDIC's liquidity needs given its impact on the TGA. As we discussed in detail here, we do not expect cash withdrawals to have an impact on the X-date as they create more room under the current debt limit. Also, bridge lending from the Fed will likely keep the FDIC from making an outsized withdrawal from the TGA. Still, these outflows will continue to inform our estimate for the amount of extraordinary measures left and T-bill supply.

Exhibit 126: Deposit Insurance Fund (monthly)



Source: US Treasury, Morgan Stanley Research

Exhibit 127: Withdrawals from TGA by FDIC



Source: US Treasury, Morgan Stanley Research

This potential increase in Fed loans driven by the FDIC is likely to keep the recent decline in reserves short lived. Also, we show that the month-to-date decline in reserves has been largely driven by the TGA due to tax payments (see Exhibit 128). Given that the TGA is set to decline over the coming weeks until the June 15 corporate tax deadline, reserves are likely to be biased upwards over the coming weeks.

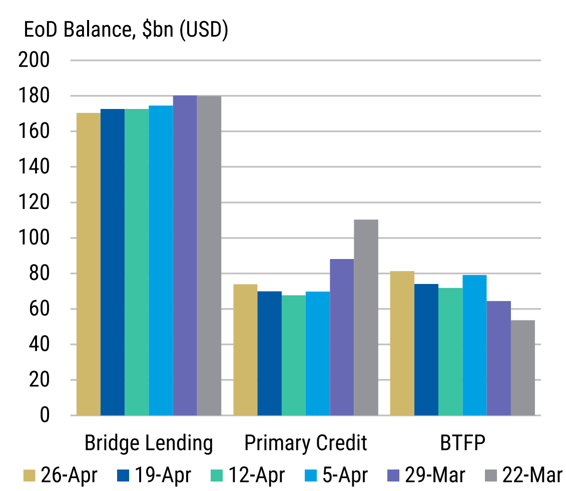
Exhibit 128: Change in reserves at the Fed

Impact on Reserves by Balance Sheet Item (in $bn)

	3Q22	4Q22	YTD	MTD
SOMA	(122)	(233)	(258)	(33)
RRP	(63)	1	(50)	(37)
TGA	66	243	83	(156)
Loans	2	(6)	319	2
Other	(30)	(39)	(4)	(26)
Reserves	**(146)**	**(35)**	**90**	**(249)**

Source: Federal Reserve, Morgan Stanley Research

Exhibit 129: Fed loans by type



Source: Fed H.4.1 release, Morgan Stanley Research

Fed H.4.1 release: BTFP increases further

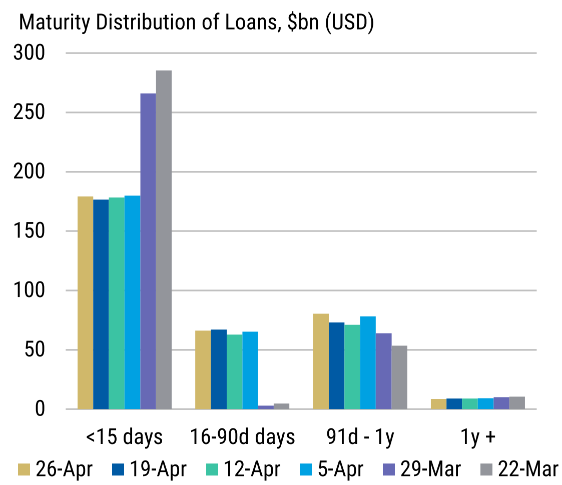
Total loans as of 4/26 increased by $8.7bn WoW. This is the second consecutive increase after 5 weeks of gradual declines. Bridge lending to the FDIC decreased by $2.2bn while primary credit (discount window) increased by $3.9bn. The BTFP increased by $7.3bn to a new high of $81bn (Exhibit 129).

The maturity composition did not shift much this week. However, as we highlighted last week (see here), most of the primary credit outstanding continues to be in the 16-90 day maturity bucket post quarter-end (Exhibit 130).

Our estimated change in loans by Federal Reserve Bank (FRB) continues to suggest that liquidity needs remain concentrated. As shown in Exhibit 131, the increase in loans continues to come from the FRB of NY (+$6bn WoW) and SF (+$5bn WoW) while all other FRBs saw a decline of $3bn.

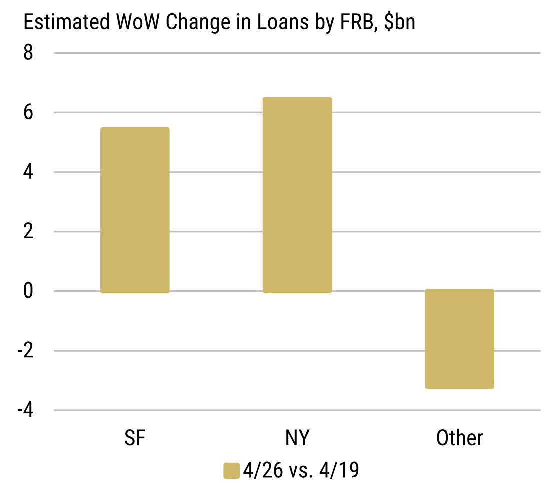
The main takeaway is that Fed loans to the banking system have not declined by any significant degree and are now trending upwards. This suggests that although liquidity needs in the banking system continue to be concentrated, the pressures remain and have been increasing over the past two weeks.

Exhibit 130: Maturity distribution of loans



Source: Fed H.4.1 release, Morgan Stanley Research

Exhibit 131: WoW change in loans by FRB



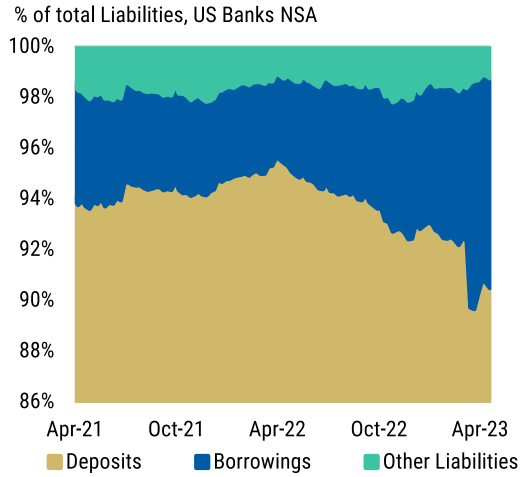
Source: Fed H.4.1. release, Morgan Stanley Research

Fed H.8 release: funding costs continue to increase

Today's Fed H.8 release as of 4/19 showed a decline in deposits of $203bn ($164bn large banks, $39bn small banks) for US banks over the past two weeks (vs. 4/5), likely driven by tax payments. Over the same time period, total borrowings for US banks increased by $18bn. This increase is likely coming from BTFP/DW credit from the Fed (see above) and to a lesser extent from FHLB advances.

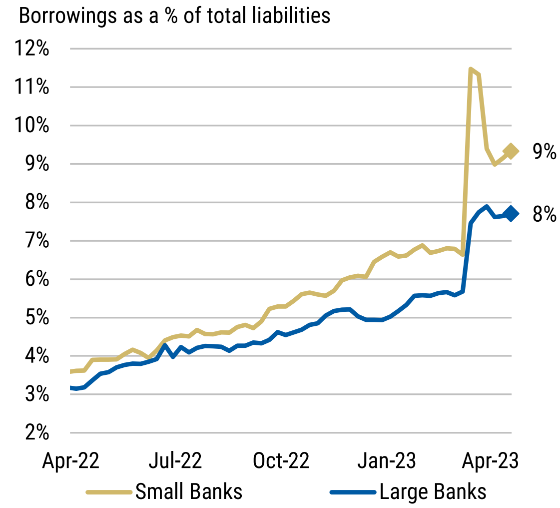
As a result, the distribution of liabilities continues to skew further towards borrowings (Exhibit 132). In addition, borrowings as a percentage of total liabilities continues to be higher for small banks (see Exhibit 133). This important metric continues to suggest that banks are increasingly facing higher funding costs.

Exhibit 132: Distribution of liabilities for US banks



Source: Fed H.8 release, Morgan Stanley Research

Exhibit 133: Borrowings as a % of liabilities



Source: Fed H.8 release, Morgan Stanley Research

- **Trade idea: Maintain long 2-month (2H June) T-bills vs. OIS at -25bp**

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 134: Government bond yield weekly pivots, support and resistance levels

	UST 10y	CAN 10y	DBR 10y	UKT 10y	JGB 20y	ACGB 10y
Weekly resistance 3	3.649	3.053	2.576	3.870	1.211	3.577
Weekly resistance 2	3.575	2.980	2.500	3.814	1.149	3.497
Weekly resistance 1	3.529	2.936	2.453	3.779	1.111	3.448
Weekly pivot high	3.454	2.863	2.377	3.724	1.048	3.368
Weekly pivot low	3.434	2.842	2.361	3.706	1.034	3.346
Weekly Support 1	3.380	2.790	2.301	3.668	0.986	3.288
Weekly Support 2	3.334	2.746	2.254	3.633	0.948	3.239
Weekly Support 3	3.300	2.715	2.212	3.613	0.915	3.204

Source: Morgan Stanley Research

Exhibit 135: Foreign exchange rates weekly pivots, support, and resistance levels

	DXY	EURUSD	USDJPY	GBPUSD	AUDUSD	USDCAD
Weekly resistance 3	102.78	1.1158	138.83	1.2710	0.6769	1.3726
Weekly resistance 2	102.34	1.1123	138.20	1.2674	0.6717	1.3683
Weekly resistance 1	102.06	1.1107	137.48	1.2634	0.6685	1.3671
Weekly pivot high	101.62	1.1043	135.61	1.2531	0.6633	1.3603
Weekly pivot low	101.47	1.1026	135.29	1.2513	0.6618	1.3581
Weekly Support 1	101.18	1.0991	134.66	1.2477	0.6581	1.3538
Weekly Support 2	100.90	1.0975	133.94	1.2437	0.6549	1.3526
Weekly Support 3	100.76	1.0944	133.11	1.2391	0.6527	1.3491

Source: Morgan Stanley Research

Exhibit 136: Foreign exchange rates weekly pivots, support, and resistance levels

	EURJPY	EURCHF	EURNOK	EURSEK	NOKSEK	AUDNZD
Weekly resistance 3	153.07	0.9942	11.9613	11.5175	0.9854	1.0998
Weekly resistance 2	152.32	0.9920	11.9058	11.4654	0.9779	1.0909
Weekly resistance 1	151.49	0.9901	11.8700	11.4435	0.9733	1.0854
Weekly pivot high	149.31	0.9847	11.7502	11.3498	0.9659	1.0765
Weekly pivot low	148.93	0.9837	11.7225	11.3237	0.9638	1.0745
Weekly Support 1	148.18	0.9815	11.6670	11.2716	0.9584	1.0676
Weekly Support 2	147.35	0.9796	11.6312	11.2497	0.9538	1.0621
Weekly Support 3	146.37	0.9772	11.5749	11.2040	0.9506	1.0573

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 137: 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	4.006	4.217	4.354	4.116	Bull Market	Bear Market	Bear Market
UST 5y	3.483	3.742	3.835	3.712	Bull Market	Range bound	Bear Market
UST 10y	3.422	3.604	3.688	3.558	Bull Market	Range bound	Bear Market
UST 30y	3.673	3.724	3.766	3.670	Bull Market	Range bound	Bear Market
DBR 2y	2.691	2.651	2.741	2.118	Range bound	Bear Market	Bear Market
DBR 5y	2.305	2.304	2.377	1.992	Range bound	Bear Market	Bear Market
DBR 10y	2.313	2.282	2.349	2.042	Range bound	Bear Market	Bear Market
DBR 30y	2.415	2.316	2.319	2.050	Bear Market	Bear Market	Bear Market
UKT 2y	3.785	3.468	3.583	3.330	Bear Market	Bear Market	Bear Market
UKT 5y	3.607	3.307	3.328	3.276	Bear Market	Bear Market	Bear Market
UKT 10y	3.719	3.443	3.447	3.320	Bear Market	Bear Market	Bear Market
UKT 30y	4.090	3.877	3.895	3.637	Bear Market	Bear Market	Bear Market
JGB 10y	0.394	0.314	0.376	0.337	Bear Market	Bear Market	Bear Market
JGB 20y	1.004	1.096	1.200	1.101	Bull Market	Range bound	Bear Market
JGB 30y	1.234	1.273	1.404	1.402	Bull Market	Range bound	Bear Market
JGB 40y	1.418	1.493	1.673	1.613	Bull Market	Range bound	Bear Market
ACGB 2y	3.040	3.136	3.227	3.138	Bull Market	Range bound	Bear Market
ACGB 5y	3.082	3.219	3.328	3.340	Bull Market	Range bound	Bear Market
ACGB 10y	3.336	3.465	3.573	3.597	Bull Market	Range bound	Bear Market
ACGB 20y	3.783	3.909	3.990	3.963	Bull Market	Range bound	Bear Market
NZGB 2y	4.564	4.647	4.794	4.350	Bull Market	Bear Market	Range bound
NZGB 5y	4.042	3.919	4.401	4.109	Range bound	Range bound	Bull Market
NZGB 10y	4.090	4.307	4.363	4.138	Bull Market	Range bound	Bear Market
CAN 2y	3.656	3.738	3.876	3.780	Bull Market	Range bound	Bear Market
CAN 5y	2.975	3.059	3.206	3.196	Bull Market	Range bound	Bear Market
CAN 10y	2.841	2.922	3.063	3.051	Bull Market	Range bound	Bear Market
CAN 30y	2.939	2.929	3.017	3.073	Range bound	Range bound	Bear Market

Source: Morgan Stanley Research, Bloomberg

Exhibit 138: 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	101.67	103.35	103.70	106.10	Bear Market	Bear Market	Bull Market
USDJPY	136.30	132.57	133.42	137.00	Bull Market	Range bound	Bull Market
USDCAD	1.3552	1.3562	1.3670	1.3428	Bear Market	Bull Market	Bull Market
USDCHF	0.8946	0.9232	0.9251	0.9448	Bear Market	Bear Market	Bear Market
USDNOK	10.6522	10.3261	10.5453	10.1810	Bull Market	Bull Market	Bull Market
USDSEK	10.2648	10.4778	10.4912	10.5620	Bear Market	Range bound	Bull Market
EURUSD	1.1019	1.0723	1.0775	1.0414	Bull Market	Bull Market	Bear Market
GBPUSD	1.2567	1.2126	1.2126	1.1940	Bull Market	Bull Market	Bear Market
AUDUSD	0.6615	0.6711	0.6862	0.6736	Bear Market	Bear Market	Bear Market
NZDUSD	0.6182	0.6209	0.6312	0.6160	Bear Market	Range bound	Bear Market
EURJPY	150.07	141.75	142.05	142.48	Bull Market	Bull Market	Bull Market
NOKSEK	0.9633	0.9955	1.0157	1.0380	Bear Market	Bear Market	Bear Market
AUDNZD	1.0696	1.0807	1.0878	1.0941	Bear Market	Bear Market	Bull Market
USDBRL	4.9880	5.1848	5.2172	5.2089	Bear Market	Bear Market	Range bound
USDMXN	18.00	18.59	18.65	19.29	Bear Market	Bear Market	Bear Market
USDARS	222.64	191.45	199.62	168.95	Bull Market	Bull Market	Bull Market
USDCLP	807.25	806.72	813.77	870.60	Range bound	Bear Market	Bull Market
USDCOP	4,695.27	4,757.64	4,797.32	4,646.64	Bear Market	Bull Market	Bull Market
USDPEN	3.7080	3.8046	3.8378	3.8571	Bear Market	Bear Market	Bull Market
USDZAR	18.29	17.71	18.33	17.59	Range bound	Bull Market	Bull Market
USDTRY	19.4515	18.9157	18.9157	18.6495	Bull Market	Bull Market	Bull Market
USDILS	3.6294	3.5299	3.6187	3.4903	Bull Market	Bull Market	Bull Market
USDRUB	118.69	76.43	77.44	75.11	Bull Market	Bull Market	Bull Market
USDPLN	4.1604	4.3831	4.3848	4.5324	Bear Market	Bear Market	Bull Market
USDCZK	21.3513	22.2067	22.2500	23.2241	Bear Market	Bear Market	Bear Market
USDHUF	338.62	365.19	365.65	382.86	Bear Market	Bear Market	Bull Market
USDCNY	6.9126	6.8341	6.9027	6.9336	Bull Market	Bull Market	Bull Market
USDIDR	14,670.00	15,299.50	15,300.00	15,221.98	Bear Market	Bear Market	Bear Market
USDINR	81.83	81.92	82.25	81.49	Bear Market	Bull Market	Bull Market
USDKRW	1,338.50	1,272.75	1,299.11	1,325.48	Bull Market	Range bound	Bull Market
USDMYR	4.4622	4.3784	4.4682	4.4788	Range bound	Range bound	Bull Market
USDPHP	55.36	54.87	55.01	56.12	Bull Market	Range bound	Bull Market
USDSGD	1.3344	1.3304	1.3393	1.3663	Range bound	Bear Market	Bear Market
USDTWD	30.7430	30.2765	30.5828	30.7256	Bull Market	Range bound	Bull Market
USDTHB	34.1430	33.9790	34.5335	35.4322	Range bound	Bear Market	Bull Market
GOLD	1,990	1,907	1,913	1,806	Bull Market	Bull Market	Bull Market
SILVER	25.05	21.73	22.27	21.55	Bull Market	Bull Market	Bull Market
CRUDE OIL	76.78	71.93	73.78	79.10	Bull Market	Bear 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 139: Trading signals for G4 smarter (beta) trading strategy

Current Risk, G4 10y Futures	G4 Strategy Weight	Trade Longs Portfolio	Fade Shorts Portfolio	Total Risk Trade Longs Only	Total Risk Trade Longs/Fade Shorts (max 200%)	Trade Longs Portfolio Entry Date	Trade Longs Portfolio Exit Date	Fade Shorts Portfolio Entry Date	Fade Shorts Portfolio Exit Date
JB 10y Future	32.50%	100%	100%	100%	200%	4/27/2023	6/6/2023	4/7/2023	5/17/2023
GE 10y Future	29.25%	0%	100%	0%	100%	-	-	4/13/2023	5/19/2023
US 10y Future	30.50%	0%	100%	0%	100%	-	-	4/18/2023	5/23/2023
UK 10y Future	7.75%	0%	100%	0%	100%	-	-	4/4/2023	5/12/2023

Source: Morgan Stanley Research

Bond Market Indicators

Our BMI(10) models are neutral to bearish for all regions. Vol-adjusted carry is broadly bearish, momentum signals are bearish for Germany and the UK, and equity market signals are bullish for New Zealand only. Business cycle indicators are generally bearish, with the exception of the US. FX signals are bullish for the UK, New Zealand, and Canada.

Our BMI(2) models are bullish for Japan and neutral to bearish otherwise. Vol-adjusted carry and momentum signals are bullish for Japan only. Equity market signal is bullish for New Zealand only. Business cycle indicators are generally bearish, with the exception of the US. FX signals are bearish for the US, Germany, and Canada.

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

Latest readings

Exhibit 140: Morgan Stanley Bond Market Indicators - BMI(10)

	Vol-Adjusted Carry	Momentum	Equity Markets	Business Cycle	FX	Average	Overall
US	-9.6 (-9.7)	1.6 (5.2)	-1.3 (-1.3)	6.0 (6.0)	-0.4 (-0.1)	-0.7 (0.0)	**0.0 (0.0)**
DE	-9.9 (-9.9)	-1.6 (-1.0)	-1.2 (2.4)	-1.1 (-1.1)	-0.3 (-2.3)	-2.8 (-2.4)	**-2.8 (-2.4)**
UK	-6.3 (-6.1)	-4.4 (-2.0)	-3.1 (2.8)	-7.0 (-7.0)	9.4 (7.3)	-2.3 (-1.0)	**-2.3 (0.0)**
JP	-6.2 (-6.1)	8.6 (8.5)	-1.8 (3.9)	-6.0 (-1.7)	-3.0 (-1.1)	-1.7 (0.7)	**-1.7 (0.0)**
AU	-5.7 (-6.0)	1.9 (4.3)	-2.3 (2.6)	-0.7 (-0.7)	-8.5 (1.8)	-3.1 (0.4)	**-3.1 (0.0)**
NZ	-8.5 (-8.5)	1.1 (2.7)	0.4 (3.3)	-1.4 (-1.4)	4.1 (2.8)	-0.9 (-0.2)	**0.0 (0.0)**
CA	-9.9 (-9.9)	0.1 (0.0)	-2.0 (0.9)	-2.3 (-2.3)	7.2 (4.7)	-1.4 (-1.3)	**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 141: Morgan Stanley Bond Market Indicators - BMI(2)

	Vol-Adjusted Carry	Momentum	Equity Markets	Business Cycle	FX	Average	Overall
US	-9.9 (-9.9)	-0.3 (5.5)	-1.3 (-1.3)	6.0 (6.0)	-9.5 (-9.4)	-3.0 (-1.8)	**-3.0 (-1.8)**
DE	-5.8 (-5.4)	-3.1 (-2.6)	-1.2 (2.4)	-1.1 (-1.1)	-8.0 (-6.8)	-3.8 (-2.7)	**-3.8 (-2.7)**
UK	-2.2 (-2.8)	-8.2 (-8.3)	-3.1 (2.8)	-7.0 (-7.0)	0.0 (0.0)	-5.1 (-3.8)	**-5.1 (-3.8)**
JP	9.0 (7.0)	6.3 (8.7)	-1.8 (3.9)	-6.0 (-1.7)	10.0 (9.9)	3.5 (5.6)	**3.5 (5.6)**
AU	-6.2 (-5.5)	-0.1 (1.0)	-2.3 (2.6)	-0.7 (-0.7)	2.0 (6.1)	-1.5 (0.7)	**0.0 (0.0)**
NZ	-8.4 (-8.4)	-1.7 (-1.9)	0.4 (3.3)	-1.4 (-1.4)	9.4 (8.4)	-0.3 (0.0)	**0.0 (0.0)**
CA	-9.2 (-9.1)	-3.2 (-3.7)	-2.0 (0.9)	-2.3 (-2.3)	-3.6 (-2.7)	-4.1 (-3.4)	**-4.1 (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 142: Morgan Stanley Bond Market Indicators - xBMIs

	Long US	Long DE	Long UK	Long JP	Long AU	Long NZ	Long CA
vs. US	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
vs. DE	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (1.5)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
vs. UK	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
vs. JP	0.0 (0.0)	0.0 (-1.5)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
vs. AU	0.0 (0.0)	0.0 (0.0)	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)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
vs. CA	0.0 (0.0)	0.0 (0.0)	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 143: Morgan Stanley Euro Sovereign Bond Market Indicators - eBMI

	Business Cycle Surprises	Momentum	Vol. Adj. Carry	Supply	Risky Assets	Overall
Periphery vs. Core	-1.2 (-1.4)	7.2 (5.4)	2.2 (1.9)	4.9 (4.9)	6.5 (5.9)	**3.9 (3.3)**
Semi-Core vs. Core	-5.4 (-4.8)	3.5 (1.4)	8.5 (8.0)	-1.4 (-1.4)	7.4 (8.0)	**2.5 (2.3)**
Periphery vs. Semi-Core	2.1 (1.7)	1.8 (2.0)	-3.2 (-3.1)	3.1 (3.1)	-0.4 (-1.1)	**1.4 (1.1)**

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

Exhibit 144: Morgan Stanley Inflation Bond Market Indicators - iBMI

Market	Oil	Momentum	Equities	Value	Average	Overall
TIPS	-0.3 (-1.8)	0.1 (2.0)	0.5 (0.4)	6.3 (6.3)	1.6 (1.7)	**1.6 (1.7)**
UKTi	-1.3 (-3.0)	5.9 (4.9)	1.5 (-1.2)	7.8 (7.6)	3.5 (2.1)	**3.5 (2.1)**
HICPxT	-1.5 (-2.9)	-2.0 (-0.9)	0.5 (-1.0)	6.6 (6.7)	0.9 (0.4)	**0.0 (0.0)**
JGBi	-0.5 (-2.3)	-0.8 (-1.3)	1.2 (-2.2)	-2.6 (-2.6)	-0.7 (-2.1)	**0.0 (0.0)**

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

How to read the xBMIs

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

Swap Spread Indicators

Our SSI(2) models imply that 2y spreads are roughly 24.7bp wide to fair value on a 6m rolling lookback. The 2std threshold is met. Our model-implied fair value can be found on Bloomberg using the ticker MSSIUS2 Index.

Our SSI(10) models imply that 10y spreads are roughly 0.2bp wide to fair value on a 6m rolling lookback. No 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 36.3bp tight to fair value on our 2y lookback window. The 0.5std 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 ~24.5bp flat to fair value using a 6m lookback. The 10s30s spread curve is about ~38.4bp 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 145: 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	24.7	28.6	11.1	36.6
10y Swap Spreads	0.2	2.2	1.8	0
30y Swap Spreads	-30	-36.3	-31.5	-40.4
2s10s Swap Spread Curve	-24.5	-26.4	-9.3	-36.6
2s30s Swap Spread Curve	-54.7	-64.8	-42.6	-77
10s30s Swap Spread Curve	-30.1	-38.4	-33.3	-40.4

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.

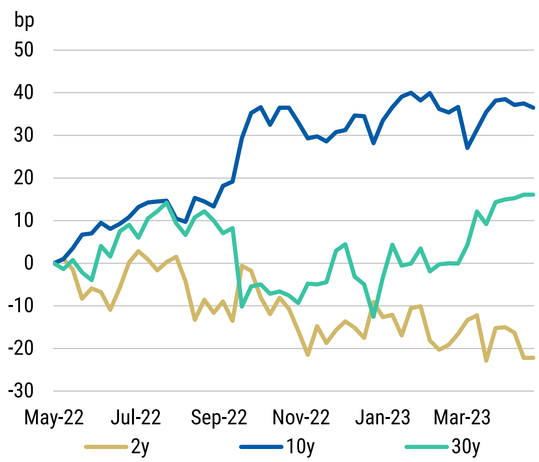
Exhibit 146: Morgan Stanley Swap Spread Indicators - Trading Signals

	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	Widen	N	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.

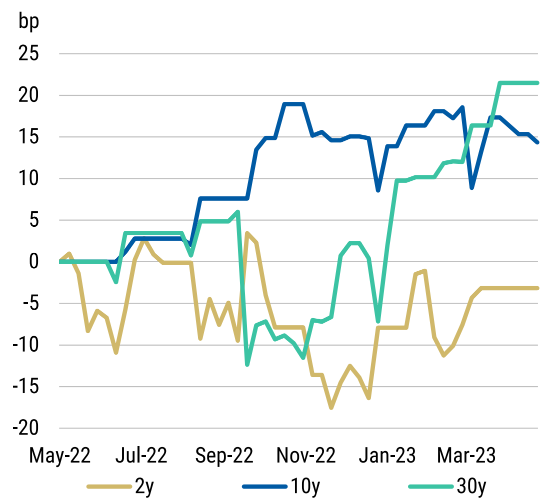
Backtesting results

Exhibit 147: 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 148: 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, new 2y, 5y, 7y were issued for a total of $120bn. These will settle in the next week when $11.5bn coupons and $146.4bn redemptions will be paid. **In the euro area,** we estimate €22.25bn issuance against €7.2bn coupons and €39.5bn redemptions this week. **In the UK,** UKT 3.5% Gilt 2025 will be issued for £4bn against no coupons or redemptions. **In Japan,** there will be an auction for enhanced liquidity for ¥500bn against ¥0.3bn coupons and ¥3trn redemptions. **In Canada,** there will be no issuance coming to the market but $0.4bn coupons and $30bn redemptions will be paid. **In Australia,** ACGB 4.5% Apr 2033 will be issued for $800mn against no cash flow coming to the market. **In New Zealand,** NZGB 0.5% May 2026, $200mn; NZGB 2% May 2032, $150mn; NZGB 1.75% May 2041, $50mn will be issued for $200mn, $150mn and $50mn, respectively, against no coupons or redemptions. **In China,** there will be no CGB issuance, against CNY 2.1bn coupons and no redemptions. No LGB will be issued for the next week, against CNY 18.3bn redemptions. Total net issuance (including both LGB and CGB) will be -CNY 20.4bn.

Exhibit 149: Sovereign supply calendar

Monday	Tuesday	Wednesday	Thursday	Friday
1-MAY	**2-MAY**	**3-MAY**	**4-MAY**	**5-MAY**
	GER: DBRi 0.1% 15 Apr 2033, €0.5bn JPY: Auction for Enhanced Liquidity, ¥500bn	GER: DBR 2.1% 15 Nov 2029 Tap, €3bn UK: UKT 3.5% Gilt 2025, £4bn AUS: ACGB 4.5% Apr 2033, $800mn	FRA: OAT Auction, €10-11.5bn OAT 3% May 2033, OAT 1.75% June 2039, OAT 3% May 2054, OAT 0.5% May 2072 SPA: SPGB Auction, €5-6bn SPGB 2.8% May 2026, SPGB Jan 2028, SPGB 1.2% Oct 2040; SPGBei 0.65% Nov 2027, €0.25-0.75bn NZ: NZGB 0.5% May 2026, $200mn; NZGB 2% May 2032, $150mn; NZGB 1.75% May 2041, $50mn	BEL: ORI Auction, €0.5bn*
8-MAY	**9-MAY**	**10-MAY**	**11-MAY**	**12-MAY**
	GER: OBL 2.2% 13 Apr 2028, €5bn AUT: RAGB Auction, €1.5bn* US: New 3y UST, $40bn* JPN: 10y JGB, ¥2700bn* AUS: ACGBi Auction, $100mn*	GER: DBR 1.8% 15 Aug 2053, €1.5bn **POR: Possible OT Auction, €1.25bn* US: New 10y UST, $35bn* UK: UKT 3.25% Gilt 2033, £3.4bn* CAN: 2y CAN Aug 2025, $3.5bn*	ITA: BTP Auction, €6bn* US: New 30y UST, $21bn* JPN: 30y JGB, ¥900bn* NZ: NZGB 0.25% May 2028, $200mn; NZGB 3.5% Apr 2033, $150mn; NZGB 2.75% May 2051, $50mn	
15-MAY	**16-MAY**	**17-MAY**	**18-MAY**	**19-MAY**
JPN: 5y JGB, ¥2500bn*	FIN: RFGB Auction, €1-1.5bn	GER: DBR 2.3% 15 Feb 2033, €4bn FRA: Medium Term Auction, €10-11bn* US: New 20y UST, $15bn* UK: UKT 4.125% Gilt 2027, £4.2bn* JPN: 20y JGB, ¥1200bn* CAN: 3y CAN 3% Apr 2026, $2bn*	US: 10y TIPS Re-opening, $15bn* SPA: SPGB Auction, €6-7bn*	JPY: Auction for Enhanced Liquidity, ¥500bn* NZ: NZGB 0.5% May 2026, $200mn; NZGB 2% May 2032, $150mn; NZGB 1.75% May 2041, $50mn

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

In Case You Missed It

Global Macro Strategy: G10 FX Chart Pack

27 Apr 2023

Top charts we are watching for each G10 currency with economic indicators, flows, positioning and drivers.

Global Macro Strategy: European Rates: Time to Re-enter Long EUR Duration

26 Apr 2023

The expected repricing of EUR long-term rates has occurred. The long list of tailwinds for the long EUR duration trade, especially in 2H23, is still there. We think it is time to re-enter long duration but through a EUR 10y10y swap receiving trade this time.

Global Macro Strategy: Global FX Positioning: Cutting Back on USD Shorts

24 Apr 2023

In the week ending April 21, options pricing data indicate that investors added long USD (DXY), SEK (versus EUR) and JPY positions and increased short CAD and NZD positions. In the futures market, USD shorts were added against GBP and CAD, while investors bought USD against AUD in the week ending Tuesday, April 18.

US Economics & Global Macro Strategy: FOMC Preview: Communicating the Pause

26 Apr 2023

We expect the Fed to deliver a 25bp hike and communicate a conditional pause. Two-way risk around the next move means the statement will likely reveal a high degree of flexibility. Our strategists maintain 2s30s and 5s30s steepeners, long 5y UST, and long USD positions.

Riksbank Preview: More of the Same

25 Apr 2023

We expect the Riksbank to hike its policy rate by 50bp this week, with another 25bp hike in June now our base case. Despite the ongoing correction in the housing market, the risks remain mildly skewed towards more hikes.

Forecasts

Government bonds

Exhibit 150: Morgan Stanley sovereign 2y, 5y, 10y, and 30y yield base case forecasts

	2Y				5Y				10Y				30Y			
	1Q23	2Q23	3Q23	4Q23	1Q23	2Q23	3Q23	4Q23	1Q23	2Q23	3Q23	4Q23	1Q23	2Q23	3Q23	4Q23
US	4.30	3.90	3.65	3.20	3.60	3.40	3.25	3.10	3.45	3.30	3.25	3.15	3.65	3.55	3.55	3.50
Germany	2.37	3.20	3.10	2.70	2.10	2.60	2.50	2.20	2.10	2.40	2.25	1.90	2.15	2.40	2.25	2.00
Japan	-0.05	0.00	0.00	0.00	0.10	0.20	0.25	0.20	0.30	0.45	0.50	0.45	1.20	1.40	1.40	1.30
UK	3.00	2.80	2.60	2.50	3.30	3.10	2.90	2.80	3.40	3.20	3.20	3.10	3.40	3.30	3.30	3.20
Canada	4.15	3.90	3.65	3.40	3.75	3.65	3.55	3.45	3.60	3.55	3.45	3.30	3.55	3.45	3.40	3.30
Australia	3.25	3.15	3.05	2.95	3.50	3.40	3.30	3.15	3.80	3.65	3.50	3.35	4.10	3.90	3.75	3.55
New Zealand	4.60	4.50	4.40	4.30	4.55	4.45	4.35	4.25	4.60	4.50	4.45	4.35	4.80	4.70	4.60	4.50
Austria*	5	5	5	5	35	30	30	30	60	55	55	55	70	65	65	65
Netherlands*	0	0	0	0	15	10	10	10	25	20	20	20	25	20	20	20
France*	10	5	5	5	30	25	25	25	45	40	40	40	75	70	70	70
Belgium*	5	5	5	5	30	25	25	25	50	45	45	45	80	75	75	75
Ireland*	10	5	5	5	15	15	15	15	40	35	35	35	80	75	75	75
Spain*	20	15	15	15	50	45	45	45	95	85	85	85	135	125	125	125
Italy*	75	65	65	65	140	140	120	105	210	210	185	175	220	220	210	195
Portugal*	10	10	10	10	40	35	35	35	85	75	75	75	125	115	115	115

Source: Morgan Stanley Research, *Spread to German Bunds

Exhibit 151: Morgan Stanley sovereign 10-year yield bull, base, and bear case forecasts

	Bull				Base				Bear			
	1Q23	2Q23	3Q23	4Q23	1Q23	2Q23	3Q23	4Q23	1Q23	2Q23	3Q23	4Q23
US	4.00	3.20	2.30	2.10	3.45	3.30	3.25	3.15	3.95	4.15	4.10	3.90
Germany	2.10	2.20	1.80	1.50	2.10	2.40	2.25	1.90	2.10	2.75	2.75	2.50
Japan	0.25	0.15	0.10	0.10	0.30	0.45	0.50	0.45	0.25	0.25	0.65	0.75
UK	3.50	3.30	3.10	2.80	3.40	3.20	3.20	3.10	3.70	3.70	3.50	3.40
Canada	3.20	3.05	3.00	2.95	3.60	3.55	3.45	3.30	3.80	3.90	3.95	4.00
Australia	3.45	3.25	3.15	3.05	3.80	3.65	3.50	3.35	4.15	4.35	4.45	4.55
New Zealand	4.15	4.00	3.95	3.90	4.60	4.50	4.45	4.35	4.85	5.00	5.05	5.10
Austria*	55	45	45	45	60	55	55	55	65	65	65	65
Netherlands*	20	20	20	20	25	20	20	20	30	30	30	30
France*	40	35	35	35	45	40	40	40	50	50	50	50
Belgium*	45	35	35	35	50	45	45	45	55	55	55	55
Ireland*	35	30	30	30	40	35	35	35	45	45	45	45
Spain*	85	75	75	75	95	85	85	85	110	115	115	115
Italy*	175	165	165	160	210	210	185	175	235	255	265	260
Portugal*	75	65	65	65	85	75	75	75	105	110	110	110

Source: Morgan Stanley Research, *Spread to German Bunds

Foreign exchange

Exhibit 152: Morgan Stanley foreign exchange base case forecasts

	1Q23	2Q23	3Q23	4Q23	1Q24	2Q24	3Q24	4Q24
EUR/USD	1.08	1.11	1.13	1.15	1.14	1.13	1.12	1.11
USD/JPY	136	133	130	127	127	127	127	127
GBP/USD	1.20	1.20	1.21	1.21	1.22	1.22	1.23	1.24
USD/CHF	0.93	0.91	0.90	0.90	0.91	0.93	0.95	0.96
USD/SEK	10.09	9.64	9.38	9.04	9.04	9.04	9.04	9.04
USD/NOK	9.54	9.01	8.67	8.35	8.35	8.35	8.35	8.35
USD/CAD	1.34	1.31	1.28	1.26	1.25	1.24	1.24	1.23
AUD/USD	0.69	0.70	0.72	0.74	0.76	0.77	0.79	0.80
NZD/USD	0.64	0.66	0.68	0.71	0.71	0.70	0.70	0.69
EUR/JPY	147	148	147	146	145	143	142	140
EUR/GBP	0.90	0.93	0.93	0.95	0.94	0.92	0.91	0.89
EUR/CHF	1.00	1.01	1.02	1.03	1.04	1.05	1.06	1.07
EUR/SEK	10.90	10.70	10.60	10.40	10.30	10.20	10.10	10.00
EUR/NOK	10.30	10.00	9.80	9.60	9.51	9.42	9.33	9.23
USD/CNY	6.68	6.55	6.60	6.65	6.65	6.60	6.55	6.50
USD/HKD	7.80	7.79	7.77	7.76	7.75	7.75	7.75	7.75
USD/IDR	15000	14700	14600	14500	14515	14531	14546	14561
USD/INR	80.8	80.0	79.7	79.4	78.3	77.3	76.2	75.1
USD/KRW	1220	1200	1185	1170	1175	1181	1186	1191
USD/MYR	4.30	4.25	4.22	4.20	4.17	4.14	4.11	4.08
USD/PHP	54.5	53.8	53.4	53.0	53.7	54.5	55.2	55.9
USD/SGD	1.32	1.305	1.302	1.300	1.302	1.305	1.307	1.310
USD/TWD	30.0	29.8	29.7	29.6	29.8	30.0	30.3	30.5
USD/THB	32.5	32.0	31.5	31.0	32.0	33.0	34.0	35.0
USD/BRL	5.15	5.25	5.20	5.15	5.07	4.98	4.90	4.82
USD/MXN	19.40	19.50	19.60	20.00	20.16	20.33	20.49	20.65
USD/ARS	211.2	242.1	277.6	454.7	580.7	691.6	793.0	892.0
USD/CLP	850	800	750	725	735	745	755	765
USD/COP	4850	4800	4775	4750	4400	4050	4600	4600
USD/PEN	3.70	3.70	3.65	3.60	3.60	3.60	3.60	3.60
USD/ZAR	16.5	16.3	16.1	16.0	16.0	16.0	16.0	16.0
USD/TRY	20.00	21.00	22.00	23.00	24.00	24.00	24.00	24.00
USD/ILS	3.50	3.45	3.40	3.35	3.42	3.48	3.55	3.62
EUR/PLN	4.70	4.68	4.65	4.62	4.57	4.53	4.48	4.44
EUR/CZK	24.0	23.9	23.8	23.7	24.9	26.0	27.2	28.4
EUR/HUF	390	380	375	370	366	363	359	356
DXY	103	101	99	98	98	99	99	100
Broad USD (Fed)	120	118	117	117	117	117	117	118

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

Exhibit 153: Morgan Stanley foreign exchange Base, Bear, Bull scenarios

4Q23	Bear	Base	Bull
EUR/USD	1.10	1.15	1.22
GBP/USD	1.14	1.21	1.26
USD/JPY	116	127	133
AUD/USD	0.71	0.74	0.79
USD/CNY	6.40	6.65	6.85
USD/INR	74.0	79.4	82.5
USD/ZAR	15.5	16.0	17.0
USD/BRL	4.80	5.15	5.70
USD/MXN	19.00	20.00	22.50

Source: Morgan Stanley Research

Trade Ideas

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

Interest Rate Strategy

TRADE	ENTRY LEVEL	ENTRY DATE	RATIONALE	RISKS
Buy Jun 136/137.5 Bund call spread	35.5 cents	28-Apr-23	We think it is now time to go back to EUR duration for numerous reasons, including valuation versus our LT model and risk assets, housing price dynamics, and supply and demand dynamics.	A further rise in the Eurozone core CPI, which would lead the ECB to tighten the depo up to 4% or higher, triggering a further rise in yields all along the curve. Risk is limited to the premium.
Receive Sep 23 ECB vs. July 23 ECB	9bp	28-Apr-23	4Q OIS meetings could head flatter than they currently are, consistent with our economists' view of ECB stopping by July at 3.75%.	A better string of economic data coupled with higher-than-expected inflation, leading the market to price in further hikes in 2H 2023.
Receive Jun 23 - Aug 23 MPC spread	16.9bp	28-Apr-23	We believe that receiving the Jun'23-Aug'23 MPC spread offers an attractive risk-reward given the current entry point, which is close to six-month highs after having repriced higher compared to similar ECB and Fed spreads. In addition, by entering into an MPC flattener, we can reduce the trade volatility and minimise any tail risk event impact compared to outright positions.	The risk is that the BoE could turn more hawkish and the market could price more hikes into the meeting.
Receive EUR 10y10y swap (vs 6m)	2.70%	26-Apr-23	We think it is now time to go back to the structural long EUR duration for numerous reasons, including valuation versus our LT model and risk assets, housing prices dynamics, and supply and demand dynamics.	A further rise in the Eurozone core CPI, which would lead the ECB to tighten the depo up to 4% or higher, triggering a further rise in yields all along the curve. Risk is limited to the premium.
Long 5y UST	3.60%	14-Apr-23	With an FOMC focused on credit concerns and banking system stress, while long-term inflation concerns linger, we see the curve could either twist or bull steepen.	The risk is that market concerns normalize and the Fed is forced to hike further.
UST 2s30s steepener	-30bp	22-Mar-23	With an FOMC focused on credit concerns and banking system stress, while long-term inflation concerns linger, we see the curve could either twist or bull steepen.	The risk is that market concerns normalize and the Fed is forced to hike further.

UST 5s30s steepener	+13bp	22-Mar-23	With an FOMC focused on credit concerns and banking system stress, while long-term inflation concerns linger, we see the curve could either twist or bull steepen.	The risk is that market concerns normalize and the Fed is forced to hike further.
JGB 15s30s steepener	54bp	17-Mar-23	We believe that the 15-20y sector, which provides higher carry + rolldown, should outperform as rates volatility declines.	A renewed selloff in global rates.
Receive Aug RBNZ vs. pay Aug RBA	174bp	17-Mar-23	Our economist continues to expect the RBA to raise rates in August and September, an outcome that would likely lead AUD to outperform given that no hikes are priced into the RBA curve. The RBNZ's latest rate announcement suggested that the reserve bank might not reach its previously forecasted terminal OCR of 5.5%.	The risk is that inflation accelerates in New Zealand, raising expectations for RBNZ policy.
Receive EUR 30s50s swap (vs 6m)	-39.4bp	3-Mar-23	30s50s is ~3/4 bp too steep, according to our model.	A key risk to the trade would be a collapse in rates volatility.
Sell 6m2y swaption receiver strike 3.50% versus buying 6m10y receiver strike 2.95%.	1.5 cents	3-Mar-23	According to our EUR 2s10s swap model, 2s10s should flatten with ECB hikes. Moreover, the 6m forward EUR 2s10s swap slope is very close to the spot level, while investors expect almost a 90bp rise in short-term rates. Such a change in short-term rates would imply a 28bp decline in the theoretical EUR 2s10s swap.	A selloff of risky assets that fuels a bull steepening of the EUR 2s10s slope.
July 95.625/95.875/96.125 put fly on Sep 23 Euribor	3.5 cents	24-Feb-23	If the economy continues to be resilient, we think the market could start to price in the possibility of the ECB going to 4%, especially as both headline and core inflation are forecast to remain high through 1H2023. Though this is not our base case, we think that entering an ERN3 95.625/95.875/96.125 put fly could provide a cheap hedge.	The ECB doesn't overtighten rates, or current market pricing stays either unchanged or will price a lower terminal rate by July's expiry. The risks are limited to the premium paid.
JPY TONA OIS 10s30s steepener	41.5bp	24-Feb-23	With the belly of the curve pricing in the near-term BoJ's YCC adjustment on OIS space to much, we see the belly of the curve outperforming in anticipation of near-term repricing of the belly of the curve lower.	The risk of this trade is further talks about positioning for YCC adjustment in the near term.
Buy OAT 2% Nov 32 vs Bund 1.7% Aug 32	49bp	3-Feb-23	We believe the recent re-widening of the 10y OAT/Bund spread provides a great opportunity to exploit the expected upcoming spread compression into the ECB QT.	A hawkish ECB and a no vote on pension reform, which would lead to selling pressures in the near term.
Schatz/Bund ASW box (long ASW)	-5.5bp	20-Jan-23	Although we still have the medium-term view of tighter core/semi-core ASW by the start of the summer, we think there is room for a corrective rewidening of ASW, especially on the 10y Bund, while the 2y bucket is trading too rich versus our model.	A major widening of peripherals spreads, which would lead to an outperformance of the Schatz ASW in the box.
Long 20y OAT vs 5y and 50y	80bp	11-Jan-23	The 30s50s OAT slope appears too rich versus our model fair value. Moreover, the faster decline in Eurozone HICP inflation and the global declining trend in house prices could lead investors to consider upcoming ECB hikes as a policy mistake, which could fuel a further inversion of the 2s10s slope. The relative cheapness of the 15y/20y OAT area could make the long 20y vs 50y a better alternative to the 30s50s.	Expectations of an early ECB cut that would fuel a bull steepening of the 5s20s segment.

Currency and Foreign Exchange				
TRADE	**ENTRY LEVEL**	**ENTRY DATE**	**RATIONALE**	**RISKS**

Short CNH/THB	4.92	28-Apr-23	We believe that CNY could underperform due to a lower trade surplus, outbound tourism, and possible capital outflows. The PBOC could be comfortable about CNY underperformance that is driven by fundamentals. Meanwhile, THB should continue to benefit from the tourism recovery and higher gold prices.	Fast FX conversion by Chinese exporters.
Short EUR/USD	1.0995	14-Apr-23	The Fed is priced to cut around 200bp below the current level by end-2024, while the ECB is not priced to cut significantly below current levels. If US growth continues to slow meaningfully (and markets price increasing risks of a US recession), we expect spillovers to pricing for other central banks, including the ECB, as well as global growth. We believe the ECB may have to cut further than the Fed in the event of a global downturn. EUR/USD would likely move lower if 2y yield differentials move in the US's favor.	The key risk to the trade is that price pressures in the US decline sharply while they remain elevated in the Euro Area, leading yield differentials to move in Europe's favor.
Short AUD/USD	0.6708	14-Apr-23	AUD looks attractive as an inexpensive risk hedge. AUD is one of the risk demand sensitive currencies in G10 but also has a relatively low front end. Meanwhile, Australian mortgage arrears have begun increasing as variable mortgage rates have risen dramatically. While house prices have shown some resilience, our economists expect prices to re-test the recent lows.	The risk to this trade is that inflation remains resilient in Australia, boosting RBA policy expectations and AUD.
Long USD/CAD	1.3442	12-Apr-23	We expect markets to price in further cuts from the BoC as the market-implied risk of a US recession increases with a deceleration of economic activity in the US. Spillover risks from the US to the rest of the world are high, especially for Canada. The outlook for oil demand has weakened, while US financial stability concerns remain elevated.	The key risks to the trade are that the US economy slows without signs of a hard landing, credit conditions tighten modestly and gradually, and financial stability concerns remain contained.
Short USD/JPY	130.44	24-Mar-23	USD/JPY could go lower via a policy convergence narrative. With US regional banks' funding concern weighing on the Fed's policy trajectory, we see increasing risk of the market pricing in a further Fed rate cutting cycle, leading to lower USD/JPY via the policy convergence channel.	USD funding concerns dissipate, and the market starts to price in a higher-for-longer scenario.
Long EUR/GBP	0.869	18-Nov-22	We see a combination of growth and policy divergence supporting our long EUR/GBP trade. More important, the UK has a structurally weaker balance of payments dynamic relative to the euro area. The UK's weak net international investment position leaves it reliant on foreign money, which should increasingly be demanding higher yields or a cheaper currency (or both) to fund its current account deficit. Unlike the UK, Europe has a wealth of domestic savings parked abroad, which we think could return home to help finance its current account deficit as local yields normalize.	The UK displays supply-led growth resilience, with household consumption remaining resilient and labor supply returning.

Inflation-Linked Bonds

TRADE	ENTRY LEVEL	ENTRY DATE	RATIONALE	RISKS
Long Feb44 iota	11bp	27-Apr-23	The Feb44 iota should widen, amid (1) uncertainty in the financial system, and (2) increased cut pricing.	The primary risks to this trade are (1) the fading of rate cuts priced in 2023, and (2) strong signs that banking stress is in the rearview mirror.

TRADE	ENTRY LEVEL	ENTRY DATE	RATIONALE	RISKS
Long 10y BE vs. 2y UST	-1.70%	31-Mar-23	Strong March CPI, combined with nominal cuts priced in 2H23, should lead inflation risk premium pricing higher in coming months. We hedge tail risks to financial stability via long 2y UST.	Risks to the financial sector do not materialize, and the market returns to pricing nominal rates higher.
Long OATei31	0.35%	10-Mar-23	Livret A hedging flows should support lower real yields across the OATei term structure and especially the sub 10-year sector. We believe demand for real yield paper will overshadow any issuance or risk-off sentiment.	A pick-up in deflation fears that would reduce hedging needs.
Buy IL28	-0.73%	18-Nov-22	Growth is likely to slow with fears of a recession becoming more prominent, and weaker growth usually leads to demand for FI assets. With inflation not falling significantly, we suspect that momentum will swing from recession into stagflation mode. Furthermore, we envision a gradual shift from the BoE to the dovish end of the spectrum.	A more hawkish BoE that will ultimately push real yields higher.

Short-Duration Strategy

TRADE	ENTRY LEVEL	ENTRY DATE	RATIONALE	RISKS
Long 2-month T-bills vs. OIS	-30bp	21-Apr-23	We expected further clarity around the timing of the X-date over the coming weeks to reduce the spread between 1-month and 2-month T-bills.	Expectations for an earlier X-date increase.

Interest Rate Derivatives

TRADE	ENTRY LEVEL	ENTRY DATE	RATIONALE	RISKS
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.

Exhibit 154: History of recommendations

Long 20y OAT versus 5y and 50y

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 ½ 05/25/2072	25-May-72	OAT 30s50s steepener	19-Aug-22	1.66%	16-Sep-22	2.40%				FR0014001NN8
FRTR 1 ½ 05/25/2050	25-May-50	OAT 30s50s steepener	19-Aug-22	2.25%	16-Sep-22	2.59%				FR0013404969

Schatz/Bund ASW Box (Long ASW)

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 V 6M	10-Sep-22	Conditional Bund ASW Widener	10-Jun-22	0	22-Jul-22	0.19				ASWABUND
EUR SPREAD RX1 V 6M	23-Dec-22	Conditional Bund ASW tightener	04-Nov-22	0.00	23-Dec-22	0				ASWABUND

Buy OAT 2% Nov 32 versus Bund Aug 1.7% 32

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 ½ 12/01/32	12-Jan-32	2s10s BTP vs BUNDS	18-Nov-22	4.03	20-Jan-23	3.91				IT0005494239
BTPS 0 08/15/24	15-Aug-24	2s10s BTP vs BUNDS	18-Nov-22	2.74	20-Jan-23	2.97				IT0005452989
DBR 1 08/15/24	15-Aug-24	2s10s BTP vs BUNDS	18-Nov-22	2.11	20-Jan-23	2.53				DE0001102366
DBR 1.7 08/15/32	15-Aug-32	2s10s BTP vs BUNDS	18-Nov-22	2.08	20-Jan-23	2.11				DE0001102606
SPGB 1.9 10/31/52	31-Oct-52	10s30s flatteners in Spain vs France	02-Dec-22	3.23	24-Mar-23	3.95				ES0000012K46
SPGB 2.55 10/31/32	31-Oct-32	10s30s flatteners in Spain vs France	02-Dec-22	2.84	24-Mar-23	3.5				ES0000012K61
FRTR 2 11/25/32	25-Nov-32	10s30s flatteners in Spain vs France	02-Dec-22	2.29	24-Mar-23	3.01				FR001400BKZ3
FRTR 0 ¾ 05/25/52	25-May-52	10s30s flatteners in Spain vs France	02-Dec-22	2.44	24-Mar-23	3.23				FR0013480613

Receive EUR 30s50s 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
EUSA5 Curncy	8-Mar-27	EUR 5s30s swap flattener	04-Mar-22	39bp	13-May-22	1.32%				EUSA5 Curncy
EUSA30 Curncy	8-Mar-52	EUR 5s30s swap flattener	04-Mar-22	63bp	13-May-22	1.54%				EUSA30 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
EUR V6m	22-Jul-32	EUR 10s30s steepeners	22-Jul-22	1.86%	16-Sep-22	2.58%				EUSA10 Curncy
EUR V6m	22-Jul-52	EUR 10s30s steepeners	22-Jul-22	1.41%	16-Sep-22	2.08%				EUSA30 Curncy
EUR V6m	16-Sep-52	EUR 30s50s flattener	16-Sep-22	0.02	05-Oct-22	0.023				EUSA30 Curncy
EUR V6m	16-Sep-72	EUR 30s50s flattener	16-Sep-22	0.02	05-Oct-22	0.0186				EUSA50 Curncy
EUSA30 Curncy	21-Oct-52	Pay EUR swap 30s50s	21-Oct-22	2.655	02-Dec-22	1.97				EUSA30 Curncy
EUSA50 Curncy	21-Oct-72	Pay EUR swap 30s50s	21-Oct-22	2.155	02-Dec-22	1.516				EUSA50 Curncy
EUSA30 Curncy	13-Jan-53	EUR 30s50s steepener	13-Jan-23	0.02	10-Feb-23	0.024				EUSA30 Curncy
EUSA50 Curncy	13-Jan-53	EUR 30s50s steepener	13-Jan-23	0.02	10-Feb-23	0.0199				EUSA50 Curncy
EUSA5 Curncy	10-Feb-28	Receive 5s10s30s Eur swap fly	10-Feb-23	2.99	03-Mar-23	3.441				EUSA5 Curncy
EUSA10 Curncy	10-Feb-33	Receive 5s10s30s Eur swap fly	10-Feb-23	2.91	03-Mar-23	3.289				EUSA10 Curncy
EUSA30 Curncy	10-Feb-53	Receive 5s10s30s Eur swap fly	10-Feb-23	2.41	03-Mar-23	2.74				EUSA30 Curncy
EUSA5 Curcny	10-Mar-28	Pay EUR 5s10s30s swap (vs. 6m)	10-Mar-23	3.26	17-Mar-23	2.385				EUSA5 Curcny
EUSA10 Curncy	10-Mar-33	Pay EUR 5s10s30s swap (vs. 6m)	10-Mar-23	3.08	17-Mar-23	2.965				EUSA10 Curncy
EUSA30 Curncy	10-Mar-63	Pay EUR 5s10s30s swap (vs. 6m)	10-Mar-23	2.58	17-Mar-23	3.085				EUSA30 Curncy

Receive 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
EUSA1010 Curncy	15-Nov-41	Pay fixed EUR 10y10y swap	19-Nov-21	0.55%	14-Oct-22	2.74%				EUSA1010 Curncy

Rec Jun'23-Aug'23 MPC Spread

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
Dec'23 MPC	14-Dec-23	Rec Dec'23 vs Feb'23 MPC	27-Oct-22	60bp	10-Jan-23	52bp				GPSF9A Curncy
Feb'23 MPC	2-Feb-23	Rec Dec'23 vs Feb'23 MPC	27-Oct-22	60bp	10-Jan-23	52bp				GPSF3A Curncy
Jun'23 MPC	22-Jun-23	Rec Jun'23 vs Mar'23 MPC	24-Feb-23	34.4bp	14-Mar-23	7.8	0bp	52bp		GPSF3A Curncy
Mar'23 MPC	23-Mar-23	Rec Jun'23 vs Mar'23 MPC	24-Feb-23	34.4bp	14-Mar-23	7.8	0bp	52bp		GPSF1A Curncy
Aug'23 MPC	3-Aug-23	Pay May'23-Aug'23 MPC Spread	17-Mar-23	4.2bp	14-Apr-23	25bp	40bp	-20bp		GPSF4A Curncy
May'23 MPC	11-May-23	Pay May'23-Aug'23 MPC Spread	17-Mar-23	4.2bp	14-Apr-23	25bp	40bp	-20bp		GPSF2A Curncy

Pay July ECB OIS versus Receive September ECB OIS

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 OIS - July ECB meeting	2-Aug-23	Pay July ECB OIS vs. receive February ECB OIS	14-Mar-23	3.25	24-Mar-23	3.145				EESF4A Curncy
EUR OIS - February ECB meeting	7-Feb-24	Pay July ECB OIS vs. receive February ECB OIS	14-Mar-23	3.25	24-Mar-23	3.17				EESF8A Curncy
EUR OIS - June ECB meeting	21-Jun-23	Receive June ECB OIS vs. pay July ECB OIS	24-Mar-23	3.14	31-Mar-23	3.27				EESF2A Curncy
EUR OIS - July ECB meeting	2-Aug-23	Receive June ECB OIS vs. pay July ECB OIS	24-Mar-23	3.18	31-Mar-23	3.42				EESF3A Curncy

Source: Morgan Stanley Research

Definition of terms

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

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

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

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

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

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

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

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

For important disclosures related to the proportion of all investment recommendations over the past 12 months that fit each of the categories defined above, and the proportion of issuers corresponding to each of those categories to which Morgan Stanley has supplied material services, please see the Morgan Stanley disclosure at https://ny.matrix.ms.com/eqr/article/webapp/318cd904-d865-11ed-910b-ba0df15b8148

Government Bond Ratings

Exhibit 155: Government Bond Ratings

Country		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				NEG													
	S&P			STA														
	Fitch				NEG													
GER	Moody	STA																
	S&P	STA																
	Fitch	STA																
FRA	Moody			STA														
	S&P			NEG														
	Fitch			NEG														
AUT	Moody		STA															
	S&P		STA															
	Fitch		NEG															
NETH	Moody	STA																
	S&P	STA																
	Fitch	STA																
FIN	Moody		STA															
	S&P		STA															
	Fitch		STA															
BEL	Moody				STA													
	S&P			STA														
	Fitch				NEG													
SPA	Moody								STA									
	S&P						STA											
	Fitch							STA										
ITA	Moody										NEG							
	S&P									STA								
	Fitch									STA								
IRE	Moody				STA													
	S&P				POS													
	Fitch				STA													
POR	Moody									STA								
	S&P								STA									
	Fitch								STA									
GRE	Moody													POS				
	S&P											POS						
	Fitch											STA						
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	**1354**	**37%**	**279**	**42%**	**21%**	**591**	**38%**
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Not-Rated/Hold	**5**	**0%**	**1**	**0%**	**20%**	**1**	**0%**
Underweight/Sell	**646**	**18%**	**79**	**12%**	**12%**	**229**	**15%**
TOTAL	**3,656**		**661**			**1543**	

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