HSBC Global Research

4 March 2024

EUR swap spreads 2

Zeitgeist shift

Fixed Income
Rates

Eurozone

- Bund underperformance versus swaps reflects the shift in expectations towards lower policy rates…
- …but even as the directional influence wanes, other factors persist and raise the possibility of still tighter spreads
- We revisit the prognosis for EUR swap spreads and the implications for investors and issuers

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Where next for Bund swap spreads?

The direction of rates has turned since we last published on EUR swap spreads (*EUR swap spreads*, 1 June 2023), and the scarcity of Bunds has eased further. These two factors explain the continued decline in Bund swap spreads and their return to more typical spread differentials relative to their US equivalents. This said, the large gap between US and German swap spreads is likely to persist.

Less top-rated Eurozone bonds than US equivalent

We think this explains the prevailing richness in Bunds versus swaps compared with the US equivalent. In the Eurozone, the stock of sovereign debt with at least one AAA credit rating is only 17% of GDP. Even if we include AA-rated countries such as France, the proportion is only 43%. Meanwhile the stock of US sovereign debt, which still has a Aaa rating at Moody's, is approximately 99% of 2022 nominal GDP.

The reduction of excess liquidity due to the roll-off of ECB pandemic lending and Quantitative Tightening may be changing the landscape: the asset holdings of the ECB have fallen by more than EUR240bn since March 2023. This is easing the acute shortage of Bunds and could lead to a further structural tightening of swap spreads.

What it means for investors

The substantial tightening of Bund-swap spreads since October 2022 led to agency bonds underperforming swaps, as they have a link to the governments that guarantee their debt. But with Bund-swap spreads approaching their long-term average, the momentum could slow, resulting in stable agency swap spreads this year. BTP spreads to Bunds have tightened due to Bund cheapness rather than Italian credit quality: we prefer to use the BTP-swap spread as a guide to valuation.

What it means for issuers

The future direction of swap spreads matters – particularly if the tightening move is complete. Issuers generally prefer exposure to floating rates if they expect lower interest rates. They will either issue short-dated fixed rate bonds or swap longer-dated fixed rate bonds to floating.

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The factors that matter

- Directionality, risk appetite, ECB liquidity, and bond supply have been the main drivers of Bund swap spreads
- Since peaking in October 2022, spreads have been on a declining trend with contributions from all factors
- We reflect on developments since our earlier report on 1 June 2023 and discuss where we think swap spreads will go next

Change in mood for swap spreads

Zeitgeist shift in Bund spreads

When we published on Bund swap spreads some nine months ago, there were already signs of a tightening trend (*EUR swap spreads: Why so wide? What would make them narrow?* 1 June 2023). We described how different factors can explain the mood of a particular time and that it is sometimes hard to disentangle one driver from another. The widest Bund swap spreads, for example, occurred when there was both a dearth of German sovereign supply and a peak in central bank hawkishness.

We were careful in the first paper not to claim causality for any factor. In particular, we thought that the direction of interest rates was correlated with swap spreads, or alternatively there was a sort of shadowing effect. Our summary of the factors (table 1) shows less clarity about the outlook for Bund swap spreads today than when they were at their peak in October 2022 or on their way down in June 2023.

The outlook for spreads is not so clear today

A glance at history would suggest spreads may have tightened enough already; Bund swap spreads are back to pre-pandemic levels, the GDP-weighted version is similar to US equivalents, and the Bund-UST swap spread differential is at its historical average (see page 10). We cannot rule out, however, a further decline on the basis that markets have a tendency to overshoot, and because some of the key drivers may not be completely spent yet.

Table 1. The impact of selected factors on Bund swap spreads

	Contribution to spreads		
Factor	Before Oct '22	After Oct '22	Expectations
Scarcity (Bund supply)	▲	▼	▼
Excess liquidity (ECB balance sheet)	▲	▼	▼
Risk aversion	▲	▼	▼/◄►
Directionality	▲	▼	◄►

Source: HSBC. Note: ▲ shows a contribution to spread widening (Bund richer vs swap), ▼ shows a contribution to spread tightening, and ◄► implies a neutral contribution.

Scarcity and supply

German deficits have eased Bund scarcity

This is the mechanical impact that occurs due to changes in net supply, as distinct from the expectation of future supply. It is certainly true that the amount of Bunds outstanding is far smaller than US Treasuries relative to the size of their respective economies (see *Cross Market* section, page 8). During the COVID-19 crisis, Germany relaxed its strict budget discipline to run deficits – but a lot of the supply was issued in the form of bills, and Bunds remained relatively

scarce (see below). However, both our economists and the European Commission expect Germany to continue running deficits in 2024 and 2025 (see *European Economics Quarterly*, Q1 2024), which would on its own make for a relative cheapening of Bunds versus swaps.

Excess liquidity

ECB purchased more than net supply in the past – but with QT this has now gone into reverse

The potential spread-widening impact of higher Bund supply in the run-up to October 2022 was swamped by the effect of ECB asset purchases under the Pandemic Emergency Purchase Programme (PEPP). At the time, the ECB was buying more than the net supply in 2020 and 2021, and in addition introduced a programme of targeted long-term loans (TLTRO III) which absorbed collateral from the financial system.

This plentiful supply of excess liquidity has now gone into reverse (see *ECB liquidity & EUR spreads* section, page 12). Three-year TLTRO III tranches have rolled off, net asset purchases have ended, and passive Quantitative Tightening (QT) started in March 2023. In 2024 QT will intensify as PEPP reinvestments are tapered, and stopped altogether in 2025. This should in our view continue to cheapen Bunds relative to swaps and thus pressure spreads tighter.

Risk aversion

The risk asset rally may have tended to tighten spreads

Risk-off shocks such as the initial COVID-19 impact in March 2020, the Russian invasion of Ukraine in February 2022 and the failure of SVB in 2023 tend to sharply widen swap spreads due to "flight to safety" dynamics. These effects tend to dissipate relatively quickly, but it could be argued that the falling equity market before October 2022 contributed to EUR swap spread widening. Conversely, the equity rally since that point may be contributing to tighter spreads.

With slow economic growth already in the price, our credit analysts do not expect significant EUR IG credit spread widening (see *Fixed Income Asset Allocation*, 13 February 2024), which suggests that this factor is unlikely to reverse. And although risk-off shocks are unpredictable, the evidence suggests they are transient, all else equal.

Directionality

Directional momentum was important for both widening and tightening moves – but it may now be waning

The evidence we found in our previous research suggests that this important factor depends on momentum rather than level. This makes sense in a market that is driven by forward-looking hedging decisions to pay or receive swaps. This is where the recent "zeitgeist shift" from expectations of higher rates towards earlier rate cuts is significant, in our view. Indeed, the recent move tighter in swap spreads could be viewed as a "catch-up" move driven by the view that rates cuts are only a matter of time.

The other factors are longer lasting, and raise the possibility of still tighter spreads

It may well be that the spread-tightening impact of the rates directionality factor has peaked given its forward-looking nature and the sharp move lower in swap rates in December (see *Looking back, looking forward* section, page 5). It's true that swap spreads are back to 2021 levels, and it seems natural that they should find a floor soon. But even if directionality does wane in importance, the other factors in our table above will be slower to dissipate, in our view. This suggests that tighter levels than seen in history are at least a possibility.

Implications for investors and issuers

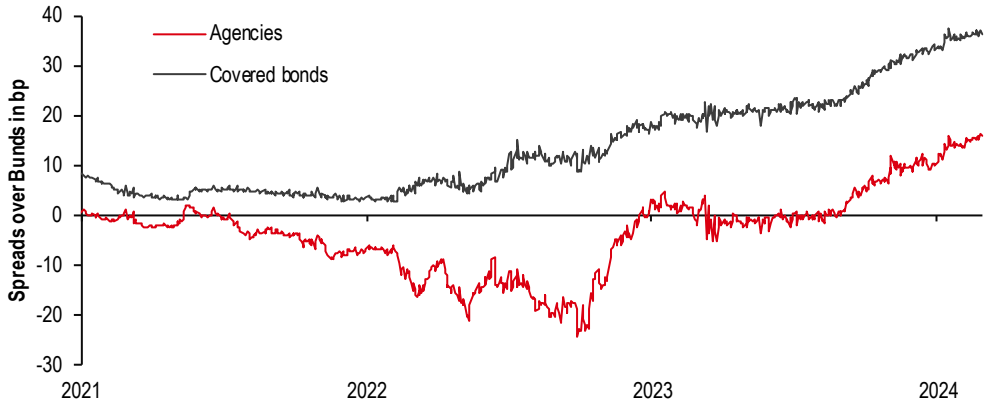
Given the change in rates direction more issuers would be expected to prefer floating funding

The call on the future direction of swap spreads will matter, especially if there is potential for the spreads to widen again. Issuers generally prefer to fix their funding level if they expect higher interest rates by either issuing long-dated fixed rate bonds or by swapping floaters to fixed rate. So the opposite would be expected in a falling rate environment, with issuers preferring floating funding. Some issuers anyway swap large parts of both the asset as well as the liability side of their balance sheet to floating to reduce the asset-liability mismatch.

Agency investors would expect to gain from a return to wider Bund swap spreads

Another aspect is the impact of Bund swap spread levels on, for instance, agency bonds. During the sharp Bund-swap spread widening in 2022, agency bonds in particular outperformed swaps, partly driven by the government guarantees which tie the yield levels of agency bonds to those of their guarantors. The substantial tightening of Bund-swap spreads since October 2022 led to the opposite effect and agency bonds underperformed swaps (Figure 1). With Bund-swap spreads approaching their long-term average, the underperformance potential of the sector against swaps is shrinking: we expect broadly stable swap spreads for agencies this year. Bund-swap spread movements have had a lesser impact on covered bond spreads which remained relatively stable during the course of 2022. However, against the backdrop of the strong Bund-swap spread tightening since Q4 2022, they have also underperformed swaps (Figure 1).

Figure 1. Swap spread development of agencies and covered bonds



Source: HSBC, IHS Markit

If swap spreads remain tight, this may lower the equilibrium level for BTP-Bund spreads

Investors in credit and other spread products would have benefitted from the spread tightening. For example, investors in Italian government bonds (BTPs) usually consider the spread relative to Bunds, and this has compressed by 30bp as the swap spread tightened (see page 16). Broadly, BTP spreads tend to follow Bund spreads, although they are higher beta: if swap spreads were to remain tight, this may lower the equilibrium level for BTP-Bund spreads. But it is unusual for BTP spreads to be driven by Bund cheapness, and we caution investors that this tightening of spread does not reflect an improvement of BTP credit fundamentals. In particular, the net supply landscape for Italy still looks challenging this year owing to both deficit financing and QT, although there are signs that demand for retail investments remains robust.

Investors looking to judge value from history may be better served by considering BTP-swap spreads in future rather than relative to Bunds. But the BTP swap spread is still at relatively benign levels: Italy has benefited from NGEU disbursements of more than EUR100bn over the last couple of years, and this reduction in funding costs and need to issue domestic debt may explain why its swap spread is not wider given the level of policy rates.

Spain is following swaps, richening versus France: this may not be over

Investors in semi-core bonds may have less incentive to asset swap their bond purchases, faced with a relatively meagre pick-up over swaps, and desiring to lock in higher yield levels in the expectation that rates will fall. French OATs have tended to follow Bunds, and have also cheapened relative to swaps. By contrast, Spanish Bonos have followed swaps more, outperforming France. This trend may not be over given the expected low supply volumes by Spain in 2024.

Looking back, looking forward

- In the nine months since our last report, directionality looks to have been the most important factor for swap spread tightening
- Our two-factor model incorporating rate and risk asset momentum suggests that spread tightening may be slowing…
- …but falling excess liquidity and QT continue to be important factors which could prolong the spread tightening trend

"Directionality matters most"

In our note on swap spreads from last year (*EUR swap spreads: Why so wide? What would make them narrow?* 1 June 2023), we looked at the possible causes of the substantial widening in Bund swap spreads seen since November 2021. We found that the most significant factors that explained this widening were Bund scarcity, more general risk aversion, the direction of rates, and central bank liquidity. At that point, our opinion was that the direction of yields would explain the next big move.

Is the recent spread tightening in line with our original findings?

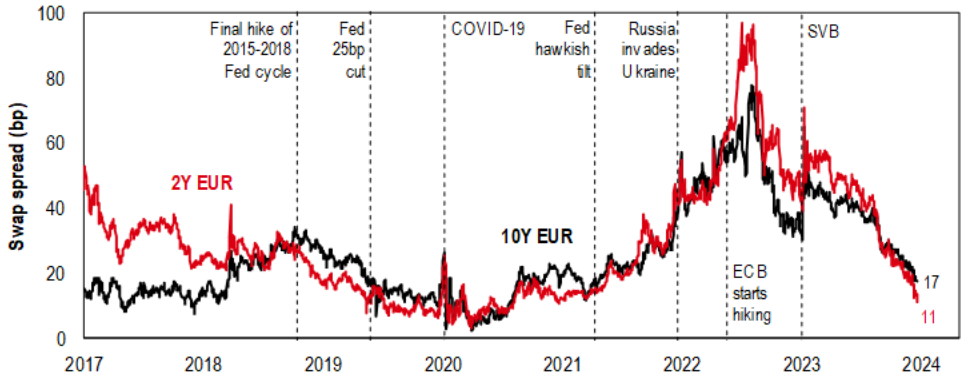
Since then, we have seen a large move tighter in swap spreads, which are now not far from historical average levels (Figure 2). This represents a cheapening of Bunds versus swaps, or alternatively receiving pressure on swap rates versus government bonds. We therefore wanted to revisit our conclusions, to see if the move in swap spreads has been consistent with our findings, whether there is anything more we can learn about their behaviour from this new information, and how this affects our view of where swap spreads may go in the future.

Risk asset moves only impact swap spreads in Ro-Ro markets

Risk sentiment has played little part in the recent evolution of swap spreads

We do not think that risk sentiment has played a large part in the evolution of swap spreads in the last nine months. Since September 2022, we have seen a rebound in the DAX and other risk asset barometers, and an absence of sudden risk-off shocks of the sort that can provoke

Figure 2. The round-trip in Bund swap spreads



Source: Bloomberg, HBSC. Note: EUR swap spreads are the ESTR swap – constant maturity Bund. UST swap spreads are the USD SOFR swap – constant maturity UST.

"flight to quality" reactions in government bond markets and widen the spread. Although Bund swap spreads (particularly in the short end) do behave like risk assets, this is mostly seen in risk-on/risk-off (RO-RO) market dynamics. There has been little evidence of this in the last year, with the market instead focussing on central bank policy decisions. This "policy driven" environment has the effect of aligning asset classes, with everything rallying or selling off at the same time. Given that swap rates are sensitive to policy rate expectations, this means that we would expect the directional driver of swap spreads to be the most significant factor.

Updating our two-factor spread model

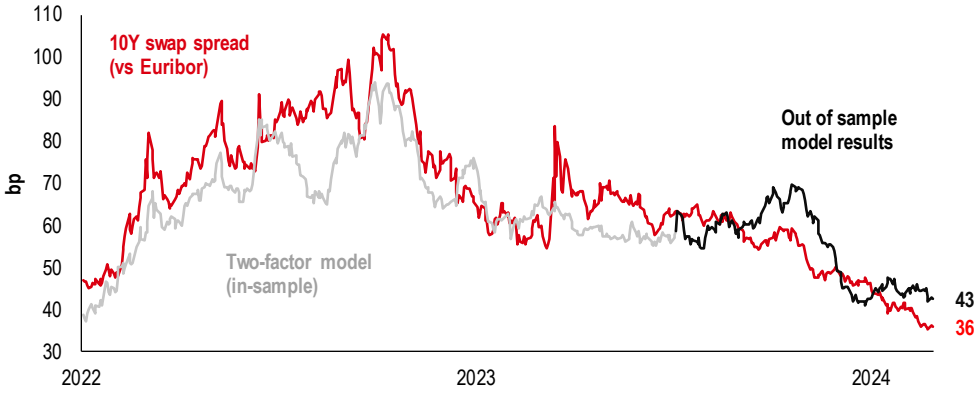
We modelled 10Y swap spreads using swap rate and risk asset momentum last July…

As a follow-up to our note, in *Global Rates Ideas* (7 July 2023) we discussed a two-factor model for EUR swap spreads, attempting to quantify the effect of directionality and risk sensitivity. For inputs, we used the 10-year swap rate (vs Euribor) and the DAX index, which has tended to correlate well to Bund spreads in past risk-off shocks. We chose to use exponentially-weighted moving averages (EMAs) to provide a smooth baseline, and measured both swap rate and risk asset momentum relative to those EMAs. The r-squared of the model was 0.6 – fair, considering its simplicity.

…and now we can examine its out-of-sample performance

In Figure 3 we update the model, effectively using the last nine months as an out-of-sample test. Within the limitations of the model, this has performed well, echoing the tightening in spread with roughly the same magnitude. The tightening of the modelled spread was almost entirely due to the fall in swap rates at the end of 2023; as we would expect, the role of the DAX component was not important in the overall move.

Figure 3. Our model results are consistent with the move in 10Y Bund spreads



Source: Bloomberg, HSBC. For model details, see text and *Global rates ideas* (7 July 2023)

Although directionality was a significant factor, it is not the only one…

The model results bear out our expectation that the direction of the swap move would be the most important factor in how swap spreads evolved. But this simple model underestimated the size of the tightening move seen by around 7bp. Although directionality looks to be the most significant factor in explaining the fall in swap spreads, it is not the only one. This simple model does not attempt to quantify the effect of asset scarcity or liquidity, but net supply, QT and the roll-off of TLTRO-III may have a bearing on Bund spreads (see *ECB liquidity & EUR spreads* section, page 12).

What do our forecasts imply for the model?

Our most recent Bund yield forecasts imply a fall in 10Y yield of c55bp from current values by end '24 (see *Bund yield forecast: Lowering our expectations*, 31 January 2024). If we assume the DAX is flat through the end of the year and swaps fall smoothly by 55bp, we can use the model to forecast the implied change in Bund spread (within the limitations of our model).

…and its influence may now be subsiding

At present, both the DAX and swaps have positive momentum, as they are both above their current EMA levels. However, the sensitivities have opposite signs: falls in DAX momentum imply wider spreads, whereas falls in swap momentum imply tighter spreads. So, although the forecast fall in swap rates should tighten the modelled spread further, this is mostly offset by the risk asset component, where falling momentum is due to the moving average catching up with the DAX.

The contribution from directionality appears to be waning. It might be that the fall seen in 2024 is a "catch-up" move from the sharp fall in rates at the end of last year, but swap spreads are already tighter than the model value: the further tightening of spreads implicit in our yield forecasts implies a 10-year swap spread around where it is currently trading (Figure 4).

Figure 4. Our model suggests the bulk of the tightening move may be over

Source: Bloomberg, HSBC

Spread tightening may not be done yet – the other factors are still significant

One interpretation of this is that the swap spread tightening move is nearly over. However, there are two caveats to such a view. Firstly, this is a simple model, and model residuals from history show observed swap spreads can deviate from modelled values by over 10bp. Secondly, this simple model only includes inputs from directionality and risk assets. As our summary in the introduction shows (Table 1), both continuing German budget deficits and the ECB's withdrawal of excess liquidity and QT would be expected to keep spreads tight in the future, all else equal. Spread tightening may slow, but it might not be done yet.

Cross-market

- Although USTs tend to trade cheap to SOFR, Bunds trade rich to equivalent maturity ESTR swaps
- Bunds' EUR benchmark status and the relative scarcity of AAA-rated EGBs contribute to their comparatively lower yields…
- …while on the swap leg, EUR investors' preference for hedging via swaps gives swap spreads more of a directional bias

EUR vs USD swap spreads

Closer than you might think

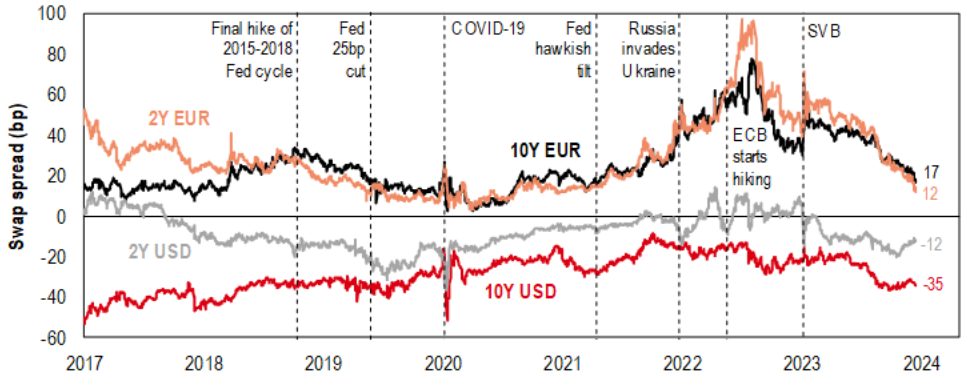
Bunds trade structurally rich to EUR swaps, but the same is not true of US Treasury swap spreads. In our previous work we identified three main drivers for this difference:

Three reasons why Bunds trade below EUR swaps, but USTs trade above USD swaps

1. The high structural demand for German bonds and bills from reserve managers and banks due to their benchmark status and credit rating;
2. The relative scarcity of AAA-rated eurozone government bonds compared to US Treasuries when normalised for the size of their economies;
3. The preference of eurozone investors for swaps as a hedging instrument over bonds due to the multiplicity of eurozone government curves, restrictions on credit quality and EU shorting restrictions on sovereign bonds.

The combination of these factors results in Bund swap spreads having the opposite sign to UST spreads (measured versus ESTR and SOFR respectively, Figure 5): whereas 10Y Bund yields are lower than the 10Y ESTR swap rate, 10Y UST yields are higher than 10Y USD SOFR swaps. This can make talk of "tightening" and "widening" spreads very confusing. In order to avoid ambiguity, we will refer to government bonds richening or cheapening relative to swaps.

Figure 5. Bund and US Treasury swap spreads



Source: Bloomberg, HBSC. Note: EUR swap spreads are the ESTR swap – constant maturity Bund. UST swap spreads are the USD SOFR swap – constant maturity UST.

Credit differences drove spread divergence

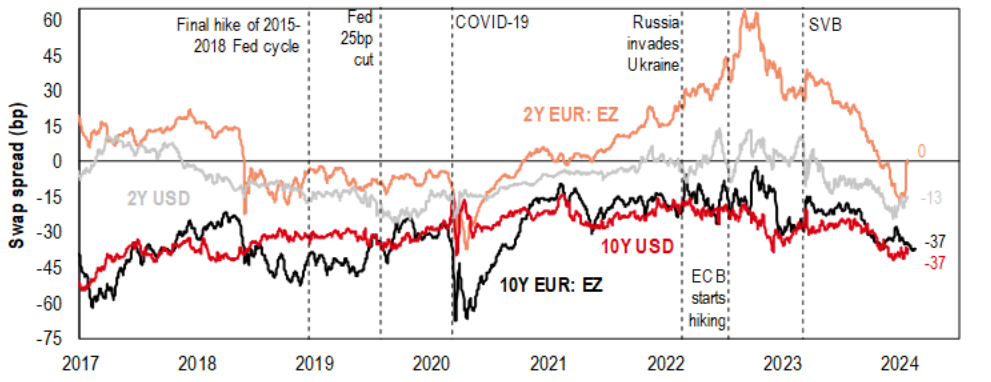
Credit rating differences and a preference for "safer" bonds drive swap spreads apart in the eurozone…

But the eurozone has many different government curves, not just Bunds. And whereas Bunds yield lower than swaps, other eurozone sovereign curves trade above – even relatively high-rated countries like France. In the early 2000s these spreads were a lot tighter, with not much differentiation between different sovereign curves: the sovereign debt crisis changed this, with credit rating downgrades for some countries, a reduction in cross-country holdings of sovereign bonds in the banking sector, and a preference for higher-rated over lower-rated government bonds for reserve and regulatory capital purposes.

…but the GDP-weighted average of 10Y EUR swap spreads is comparable to those in the US

The combined effect of this was to drive prices of highly-rated debt up and lower-rated bonds down. This created the credit spread between eurozone sovereigns ("creditisation"). But if we put those spreads back together – weighting by GDP – we obtain something that is far closer to USD swap spreads (Figure 6). This suggests to us that the EUR and USD swap spread markets are more similar than they may first appear. What is different is the impact of creditisation on government bond markets, which made lower-rated government bonds trade cheap to swaps and higher-rated ones trade rich. Bunds became the de facto AAA-rated benchmark of the euro area as they are the largest AAA-rated sovereign by a considerable margin, and hence trade at a premium even compared to AAA-rated DSLs.

Figure 6. GDP-weighted swap spreads show more alignment with the US



Source: Bloomberg, HBSC. Note: EUR swap spreads are the ESTR swap - GDP-weighted sovereign yield. USD swap spreads are the USD SOFR swap - UST. GDP-weighted sovereign yield calculated across Germany, France, Italy, Spain, Netherlands, Belgium, Ireland, and Austria, using two-year lagged real GDP weights to ensure data availability. Five day moving average of all series.

Differences still persist in the short end

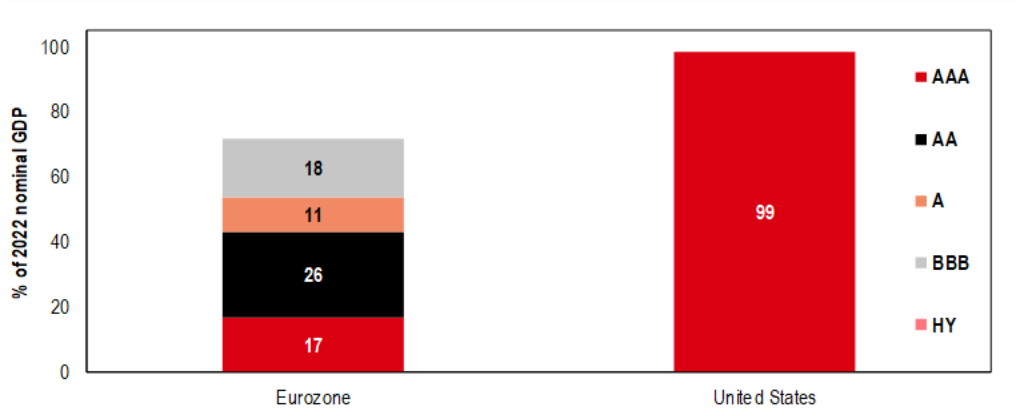
At shorter maturities, credit differences are not as pronounced, and the EUR average remains rich

The GDP-weighted swap spread removes most of the differences between 10-year swap spreads in EUR and USD. However, short-end eurozone sovereign bonds still trade rich to swaps compared to the US, even after this averaging process. This is for two reasons: firstly, the credit differentiation we highlighted above only really comes into play for longer maturities. Secondly, the short end tends to trade rich due to demand from reserve managers and any non-bank investors who demand money-like EUR assets but do not have access to ECB reserves. The combined effect of these factors is to richen the weighted average of shorter maturities.

Relative asset scarcity

Although it is commonly accepted that the relative scarcity of Bunds compared to US Treasuries is one of the drivers of EUR swap spreads, the scale of the difference may be under-appreciated. As shown in Figure 7, the stock of US sovereign debt is approximately 99% of 2022 nominal GDP. For the eurozone, the stock of sovereign debt with at least one AAA credit rating is only 17% of GDP. Even if we include AA-rated countries including France, the proportion is only 43%.

Figure 7. High-quality sovereign collateral much more scarce in the eurozone



Source: Bloomberg, Eurostat, BEA, HSBC. Note: includes bills and nominal and inflation-linked government bonds.

Regulatory changes favoured highly-rated EUR debt; sovereign credit downgrades made it more scarce

And at the same time that the sovereign debt crisis motivated a raft of credit rating downgrades, demand for high-quality liquid assets was growing as a result of banking sector regulation in the aftermath of the Global Financial Crisis (GFC). These two factors in our view created a structural imbalance in the eurozone, causing highly-rated government debt to trade rich to swaps – which are used for speculation and hedging, as opposed to government debt which can also be used as a source of standby liquidity and collateral.

Back in line with history

The difference between Bund and UST swap spreads is back at the post-2015 average level

Measures of cross-market spread can also be used to judge fair value for EUR swap spreads. Figure 8 shows that the differential between Bund and UST swap spreads has fallen back to the post-2015 average level. The Bund spread had widened in excess of the spread for US Treasuries in 2022, which fits with our observation from last years' report that Bund scarcity tended to exacerbate directional moves, making the Bund spread relatively high beta.

However, the market may overshoot, or there may be a regime shift

Returning to the average level may also suggest that the bulk of the tightening move is over – but does not rule out the possibility of an overshoot, or that the equilibrium spread differential may have shifted. Investors should note that the spread differential was around zero before the 2008 financial crisis, and the average differential was lower before the start of ECB QE in 2015. Regime shifts happen, and may happen again in the future.

Figure 8. Bund-UST swap spread differential back in line with post-2015 average

Source: Bloomberg, HSBC. Note: EUR swap spreads are the Euribor 6M swap – constant maturity Bund. UST swap spreads are the USD SOFR swap – constant maturity UST.

The changing swap landscape

In the GFC, swap spreads were used as a barometer of financial system stress, and risk-off sentiment more generally. However, since that time the swap landscape has changed dramatically. We highlight three factors:

1. Central bank liquidity;
2. Central clearing;
3. Benchmark regulation.

Central bank liquidity

Interbank lending used to be the principal source of funding liquidity for banks, with borrowing from the central bank stigmatised as a sign of distress. This meant that even weaker banks would tend to borrow interbank, and the credit premium on LIBOR rates reflected credit stress in the banking system – particularly as the underlying for LIBOR swaps was a three- or six-month term rate.

In the aftermath of the GFC, accessing central bank liquidity became easier, cheaper, and free of stigma

In the aftermath of the GFC, accessing central bank liquidity became easier, cheaper, and free of the stigma of borrowing from a last-resort lender, as all banks had made use of such facilities. But this meant that any bank that would find it challenging to fund in the interbank market has recourse to central bank liquidity, and thus funding stresses may not so clearly show up in the interbank market. This effectively stops swap spreads being useful as a systemic risk measure. It also reduces their sensitivity to risk-off events – but does not eliminate it, as "flight to quality" flows still impact the government bond leg for Bund swap spreads (e.g. in March 2020).

Central clearing

Central clearing greatly reduces counterparty risk, but increases demand for high-quality collateral

Another big change in market structure came with the advent of central clearing. Vanilla swaps are now cleared in both USD and EUR, meaning that both the counterparties face the central clearer as a counterparty rather than each other. In order to protect the systemically-important central clearing hub, initial and variation margin collateral is posted. This has the effect of eliminating counterparty risk as an element in swap pricing, but as a result makes the process of trading swaps more collateral-intensive. This in turn drives demand for high-quality collateral to avoid large haircuts, which exacerbates the shortage of highly-rated government debt in the euro area.

Benchmark regulation and the demise of LIBOR

As detailed in a recent BIS Report[1], the shift away from LIBOR as a benchmark in the wake of the GFC has resulted in different benchmarks being adopted by different trading blocs. The new "Risk-Free Rates" (RFRs) of ESTR and SOFR are far less sensitive to credit risk, as they are overnight and tightly linked to policy rates and in the case of SOFR reflect secured lending. Euribor (as mentioned in our previous report) was reformed into an unsecured but transaction-based benchmark, and is still in use.

Swap spreads are now less volatile, and not so much a barometer of banking system stress

This means that swap spreads do not behave the same way that they have in the past. Prior to the GFC, swap spreads were used as a barometer of risk sentiment, particularly banking sector stress. Now, not only do all banks access central bank liquidity as detailed above, but also the benchmark rates themselves are less risky as a result of benchmark reform and central clearing. This has made swap spreads less volatile. But, although the swap leg has been largely de-risked, the bond side of the spread continues to respond to "fight to quality" market moves in risk-off shocks.

[1] "The post-Libor world: a global view from the BIS derivatives statistics," BIS Quarterly Review, December 2022

ECB liquidity & EUR spreads

- Excess liquidity in the eurozone banking sector has contributed to the scarcity of highly liquid assets
- Both the ECB asset purchase programmes as well as the TLTRO played an important role in this context
- The swap performance of supra & agency bonds is to a large extent driven by Bund-swap spread movements

Scarcity of highly liquid collateral

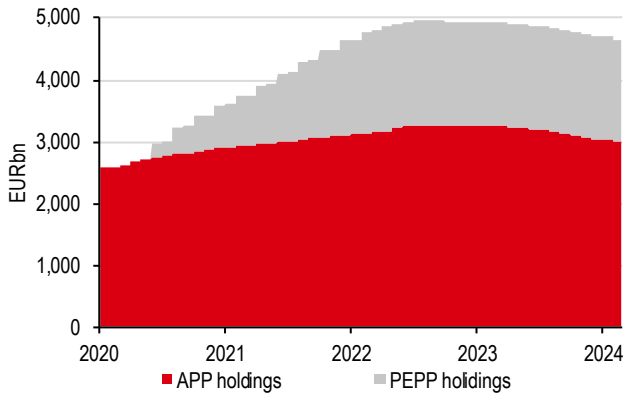
Impact of the purchase programmes

Excess liquidity in the eurozone banking sector has contributed to the scarcity of highly liquid ECB eligible assets. In this context, both the ECB asset purchase programmes as well as the TLTRO played an important role. Under the Asset Purchase Programme (APP) and the Pandemic Emergency Purchase Programme (PEPP), the ECB bought large amounts of highly liquid bonds between 2020 and 2022 (Figures 9 and 10). These purchases directly contributed to the lack of liquid assets and the supply/demand imbalances.

Demand/supply imbalances driven by excess liquidity and increased demand for short-term high-quality assets

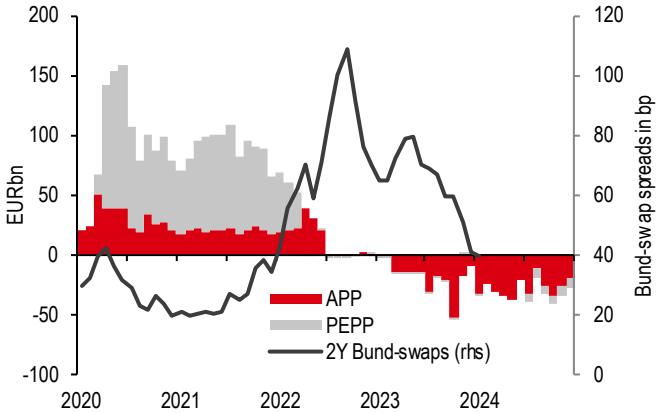
Back in September 2022, ECB chief economist and ECB board member Philip Lane highlighted that "there has been a widening of the spread between short-term government bill rates and swaps with the same maturity... This can be mainly attributed to demand/supply imbalances in the market for short-term government bills, which is partially driven by the level of excess liquidity and increased demand for short-term high-quality assets. This increased demand is also motivated by the current interest rate uncertainty and high level of volatility. These

Figure 9. ECB holdings under APP and PEPP



Source: HSBC, ECB, Bloomberg

Figure 10. Net purchases by the ECB under APP and PEPP



Source: HSBC, ECB, Bloomberg (figures for February and December 2024 are based on the APP redemptions figures and negative net purchases of PEPP of EUR7.5bn.

demand/supply imbalances of high-quality collateral with short-term maturities can also be observed in other jurisdictions of major central banks for similar reasons."[2]

The asset holdings of the ECB have fallen by more than EUR240bn since March 2023

In March 2023, the ECB embarked on QT. Between March and June 2023, a monthly volume of EUR15bn of the APP redemptions were not invested. Since July 2023, the entire monthly APP redemptions are no longer reinvested. As a result, the asset holdings of the ECB have fallen by more than EUR240bn since March 2023. Driven by high demand for ECB-eligible highly-liquid assets, Bund-swap spreads richened (i.e. became wider) since the beginning of 2022, but negative net purchases by the ECB since March 2023 have contributed to the cheapening of Bunds versus swaps.

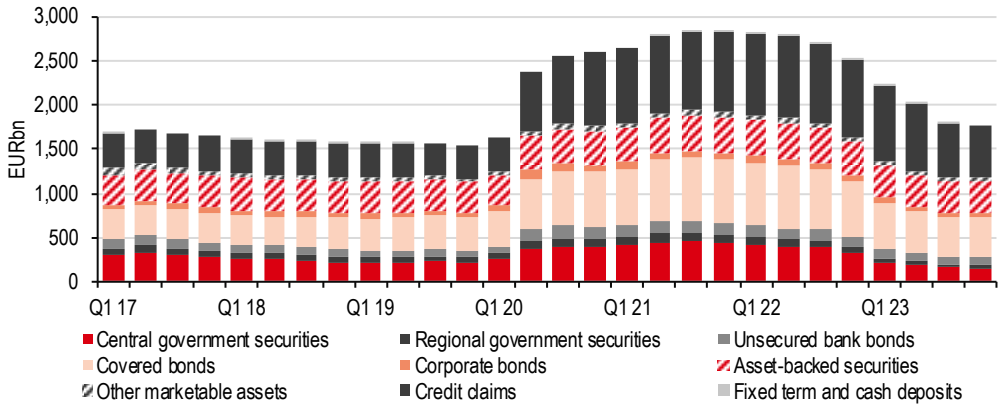
This year, the expected APP redemptions will amount to EUR334bn, which according to the ECB will not be reinvested. During the first half of 2024, the ECB will continue to reinvest, in full, the PEPP redemptions. Over the second half of the year, it intends to reduce the PEPP portfolio by EUR7.5bn per month on average, resulting in an overall reduction of the ECB's asset holdings by about EUR380bn. We believe that the increase in negative net purchases could potentially lead to a further tightening of Bund-swap spreads.

Impact of the TLTRO programme

The TLTRO-III programme also played an important role in the asset squeeze

Besides the ECB purchases under its various programmes, the TLTRO-III programme also played an important role in the asset squeeze. Between September 2019 and December 2021, Eurozone banks received almost EUR2.4 trillion of liquidity from the ECB in ten separate TLTRO tranches. In the aftermath, the collateral amounts posted by the banks at the ECB increased to new highs (Figure 11). The sharp rise in posted collateral in Q2 2020 was driven by the large fourth TLTRO tranche. Since the peak in Q3 2021, the posted collateral has dropped by almost EUR1.1 trillion to EUR1.8 trillion at year-end 2023.

Figure 11. Posted ECB collateral by type



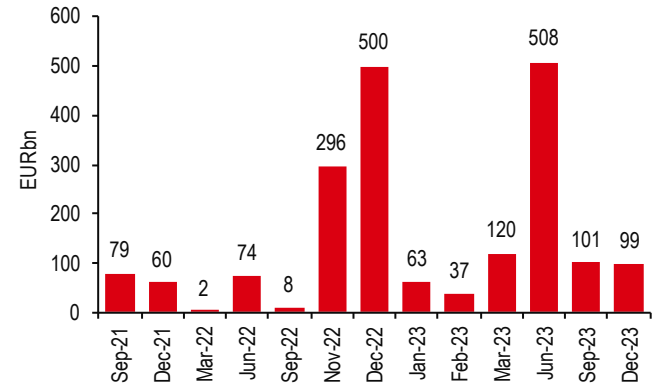
Source: HSBC, ECB

The TLTRO repayments have freed up liquid assets as banks needed less the ECB collateral

The TLTRO repayments have freed up liquid assets as banks needed less ECB collateral. Figure 12 shows the large repayments of almost EUR800bn in November and December 2022 as well as the more than EUR500bn in June 2023, which in our view helped to lessen the asset squeeze. Since 2021, almost two trillion euros of TLTRO money has been repaid, leaving less than EUR400bn of outstanding TLTRO tranches which will all will mature this year (Figure 13).

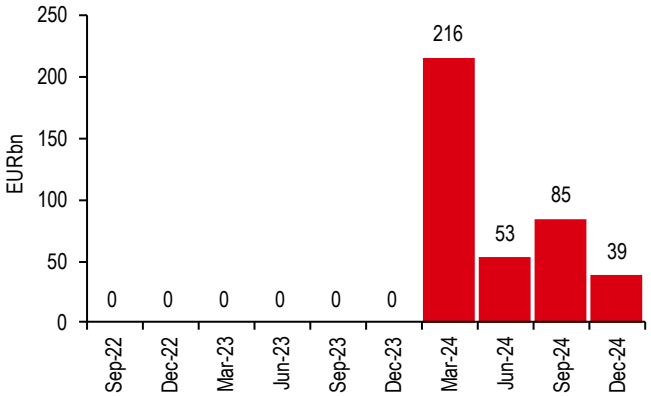
[2] Philip R. Lane, Monetary policy and the money market, 14 September 2022. https://www.ecb.europa.eu/press/key/date/2022/html/ecb.sp220914~79c898d157.en.html

Figure 12. TLTRO-III repayments



Source: HSBC, ECB

Figure 13. Outstanding TLTRO-III volumes

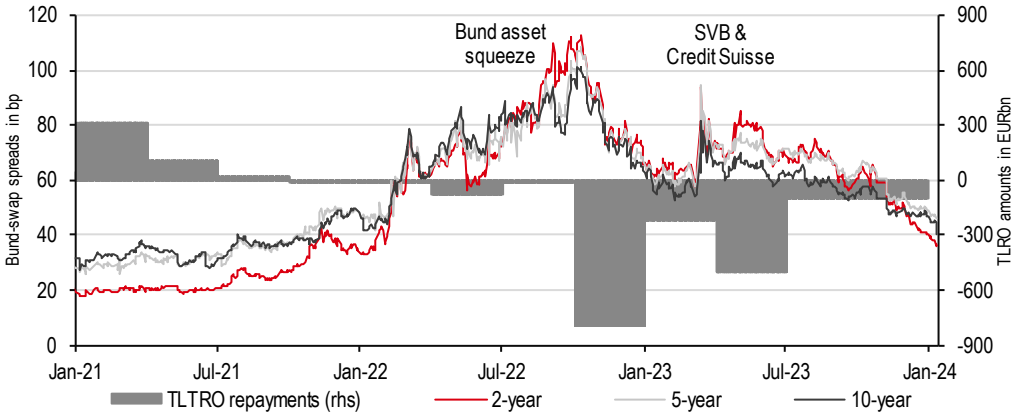


Source: HSBC, ECB

Compared to the volumes over past two years, these figures are relatively small and the impact on the availability of collateral and hence on the Bund-swap spreads will probably be negligible, in our view.

Figure 14 shows the impact of the TLTRO repayments. Against the backdrop of the large repayments in November and December 2022, Bund-swap spreads tightened from the peak in October 2022. Excluding the flight-to-safety flows in light of the market turmoil surrounding the Silicon Valley Bank in the US and Credit Suisse in Europe during March and April 2023, Bund-swap spreads further tightened, partly driven by the additional repayments in 2023.

Figure 14. Impact of TLTRO repayments on Bund swap spreads



Source: Bloomberg, HSBC, ECB

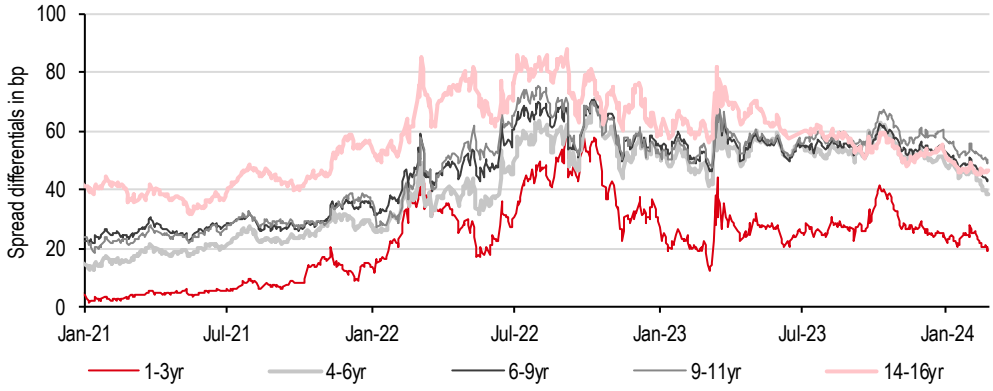
European Sovereign supranational and agency spreads

Supras & Agencies

Typically, supras and agencies (S&A) are priced against swaps. However, if Bund-swap spreads widen significantly – as seen in the past few years – many S&A investors start to also focus on the yield pick-up over Bunds and OATs. This means that the performance of S&As against swaps is to a large extent driven by the development of Bund-swap spreads. A prime example in this context is KfW, which is explicitly and directly guaranteed by the Federal Republic of Germany. Normally, one would expect KfW to trade at relatively stable spreads over Bunds, reflecting the difference in liquidity and deal sizes as well as the availability of a highly liquid Bund future. Moreover, in risk-off scenarios, Bunds also benefit from safe haven flows in

times of market turmoil. In normal scenarios the liquidity and risk premiums between Bunds and KfW added up to 20-30bp for medium-term maturities. However, at the height of Bund-swap widening in the second half of 2022, KfW's bonds with medium-term maturities offered a yield pick-up of 50-70bp on average without being driven by safe-haven flows.

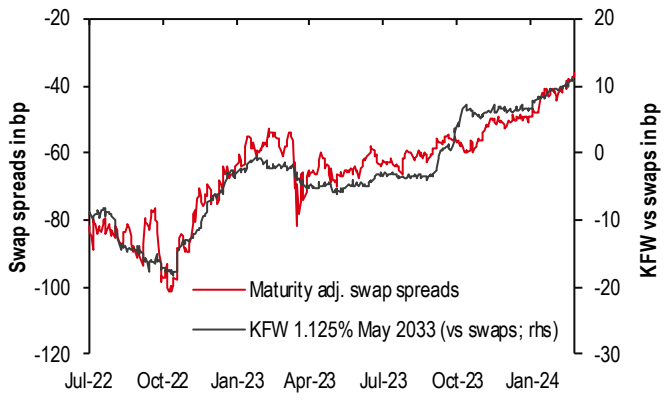
Figure 15. KfW vs Bunds



Source: HSBC, Bloomberg

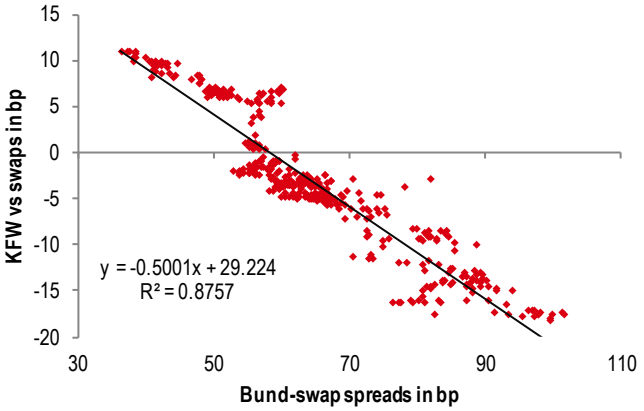
Taking KfW's bond maturing in May 2023 as an example, this has widened from m/s-20bp in October 2022 to m/s+10bp at the end of February. The maturity adjusted Bund-swap spreads has tightened from -100bp to below 40bp over the same period (Figure 16). Regression analysis shows that the negative correlation is very high at almost 0.88 (Figure 17). Typically, half of the Bund-swap spread tightening feeds into wider swap spreads of KfW bonds.

Figure16. KfW 10 year bond vs swaps



Source: HSBC, Bloomberg (maturity adjusted swap spreads over Bunds)

Figure 17. Negative correlation between KfW's 10 year bond vs swaps with Bund-swap spreads



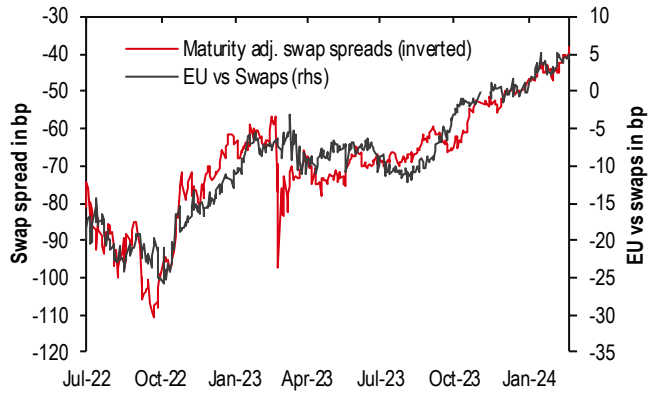
Source: HSBC, Bloomberg (maturity adjusted swap spreads over Bunds)

EU: Swaps

The strong correlation between Bund-swap spreads and the swap performance of issuers is not limited to German-guaranteed KfW bonds. Over the past two years, the EU 1Y-10Y index has also underperformed swaps. The five-year Bund-swap spread has fallen from its peak of almost 110bp at the end of September 2022 to less than 40bp now. Over the same period, the EU 1Y-10Y index – which has an average maturity of about five years – has widened from m/s-25bp to around m/s+5bp now (Figure 18). This means that – as a rule of thumb – a Bund-swap tightening of 10bp leads to a widening EU spreads over swaps of approximately 5bp. Similar to

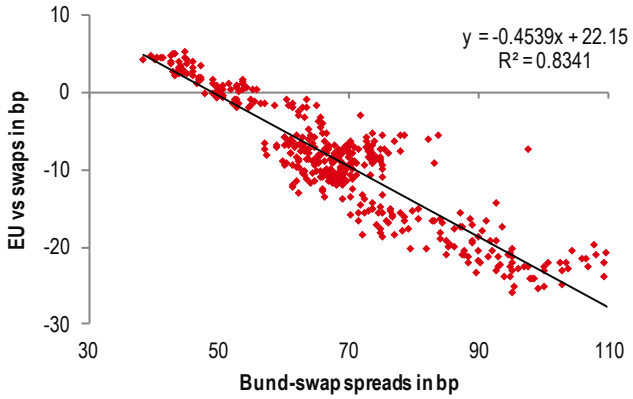
KfW, there is negative correlation between EU bond spreads and Bund-swap spreads. At 0.83 the correlation coefficient is quite high and significant (Figure 19).

Figure 18. EU 1-10 year iBoxx index performance vs swaps



Source: HSBC, Bloomberg (inverteds maturity adjusted swap spreads over Bunds)

Figure 19. Negative correlation between EU 1-10 year iBoxx index vs swaps with Bund-swap spreads*

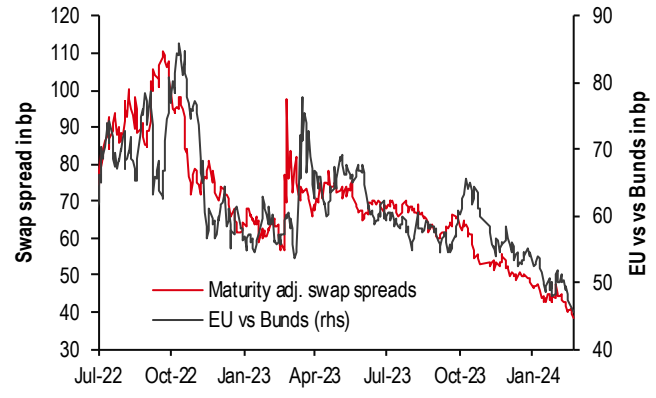


Source: HSBC, Bloomberg (*maturity adjusted swap spreads over Bunds)

EU: Bunds

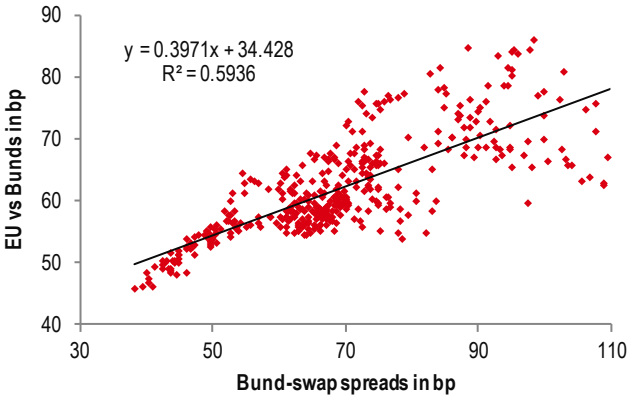
EU spreads over Bunds are positively correlated with Bund-swap spreads. Since October 2022, the spread of the EU 1Y-10Y index has fallen from 85bp over Bunds to 45bp over Bunds. Bund-swap spreads have fallen by 70bp to below 40bp (Figure 20). However, compared to EU spreads over swaps, the correlation coefficient of EU spreads over Bunds is a bit lower at 0.59. Particularly in the case of very high Bund-swap spread levels of 70bp and more, the correlation seems to break down (Figure 21).

Figure 20. EU 1Y-10Y iBoxx index vs Bunds



Source: HSBC, Bloomberg

Figure 21. Positive correlation between EU 1Y-10Y iBoxx index vs Bunds with Bund-swap spreads



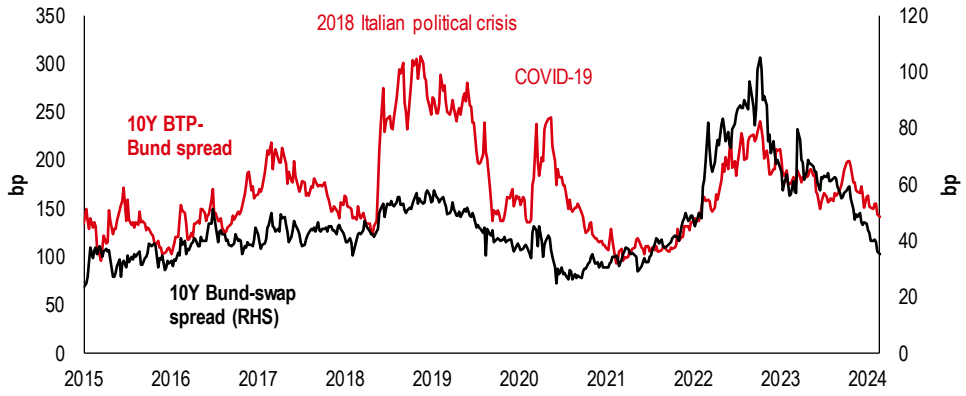
Source: HSBC, Bloomberg

BTP spreads

The spread to the Bund (popularly termed “Lo Spread” in Italy) has been the most popular way of measuring BTP risk since the days of the sovereign debt crisis (2010-12). The BTP-Bund spread responds to the same sort of risk cues as EUR swap spreads, and has followed it in broad terms – although there have been periods where Italian idiosyncratic risk has predominated, for example in 2018, and in 2020 when the initial COVID-19 outbreak was

centred on Italy (Figure 22). The 10-year BTP spread is relatively more volatile, having a beta of around 2.0 to the 10-year Bund swap spread (weekly data from 2021-present).

Figure 22. BTP-Bund spreads have broadly followed EUR swap spread trends

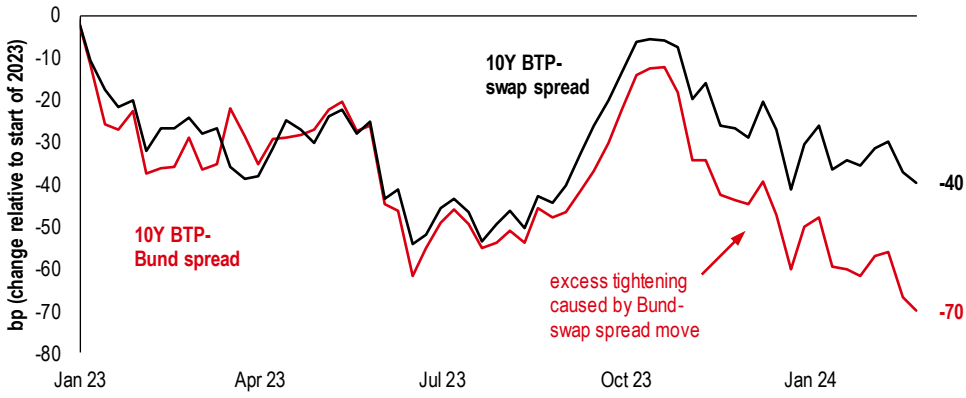


Source: Bloomberg, HSBC. Euribor swap spread; RV constant maturity yields

Recent BTP-Bund spread tightening move has little to do with BTP credit sentiment

Both the BTP-Bund spread and Bund swap spreads has tightened since their October 2022 peak. However, the rapid weakening of Bunds relative to swaps has also compressed the BTP-Bund spread, making it look rich compared to history. The BTP-Bund spread is generally viewed as a credit spread of BTPs. But in our view this recent move has little to do with BTP credit sentiment. The tightness of the BTP-Bund spread thus gives a false picture of BTP risk, making BTPs look rich to history when the move was due to Bund weakness rather than BTP strength. We think a better way of looking at BTP spreads at present is to use the swap spread, relative to which BTPs currently look much closer to fair value (Figure 23; see also *Fixed Income Asset Allocation*, 13 February 2024). Italy has benefited from NGEU disbursements of more than EUR100bn over the last couple of years, and this reduction in funding costs and need to issue domestic debt may explain why its swap spread is not wider given the level of policy rates.

Figure 23. Bund weakness visible in tight BTP-Bund spreads



Source: Bloomberg, HSBC. Euribor swap spread; RV constant maturity yields

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ASW (also asset-swap, Buy on asset swap, Buy on an asset-swapped basis): Buy a bond packaged with a swap that is tailored to eliminate the bond's interest rate risk, effectively transforming the bond to a floating rate instrument whilst preserving the credit exposure to the bond issuer.

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