

# Alforum

## Alpha-seeking perspectives on global fixed income

For professional investor use only • Fixed Income

Q3 2023

### Key points

- Consensus is growing that a plateau is likely to follow the peak of this hiking cycle, with central banks determined to suppress inflation even at the cost of growth. With risk assets recently coming into favour, investors should balance such return-seeking exposures with institutions' monetary-policy prerogative and take advantage of the defensive qualities of carry. **See p.02**
- We are constructive on sovereign fixed income, given current yields and the certainty provided by the culmination of policy tightening (**see p.06**). Also, the return of the negative correlation between duration and credit risk strengthens the ability of sovereign debt to act as a diversifier. With inflation shocks potentially giving way to growth scares, we argue that a barbell approach using high-yield credit for carry and duration for diversification can add significant value. **See p.16**
- In the real-estate sector, tighter lending conditions are beginning to weaken credit fundamentals, increase ratings drift and result in more issuers being downgraded from investment grade to high yield. For asset managers able to cross the ratings divide and invest in 'fallen angels' whose high-quality assets and inflation-linked rents provide good prospects for price recovery, this is a source of opportunity. **See p.09**
- Green and sustainability-linked debt issuance proved resilient in H1. Loan volumes may have declined amid bank tightening following the stresses in March and April, but green-bond issuance has surged by 19% year-on-year, with sovereign issuance a key driver. India, Turkey and Israel debuted on the market and Japan may soon join. **See p. 12**



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In our monthly Forum, LOIM's fixed-income specialists debate market dynamics to clarify their convictions. *Alforum* reflects this pursuit of diverse alpha sources, which drives our global strategy.

# LEAD COMMENTARY

## Marching to the beat of a different drum

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### Need to know

- Despite some warning bells early this year, a somewhat counterintuitive level of market optimism returned in Q2. As a result, risk assets including high-yield bonds outperformed in late May and June
- Market participants should balance return-seeking plays with the knowledge that central banks are prepared to engineer a hard landing if needed to bring inflation back within target ranges
- Unlike in recent cycles, the existence of positive carry enables a prudent approach while exploiting tactical opportunities in fallen angels and emerging-markets local-currency debt

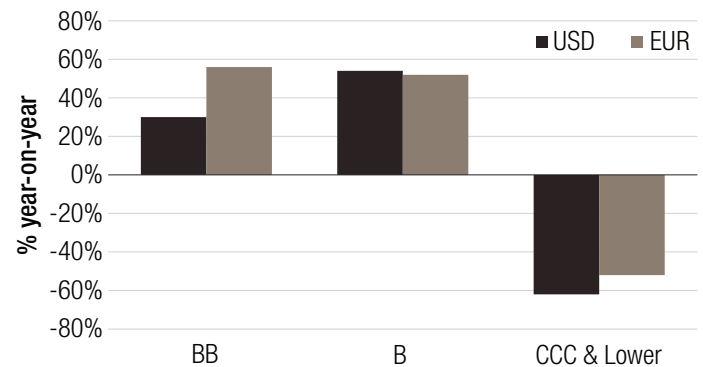
### Shut up and dance?

As former Citigroup CEO Charles ‘Chuck’ O. Prince III once [famously noted](#) (in relation to the firm’s leveraged lending practices in the quarters leading up to the financial crisis): “As long as the music’s playing, you’ve got to get up and dance.”

As we enter the second half of the year, markets seem to have taken this attitude to heart. Despite some warning bells sounding in the first few months of 2023, in the form of upside inflation surprises and a mini-banking crisis, markets have been quick to regain confidence. Given ongoing uncertainty in the macro environment, risk appetite among many investors is strong – just look at the S&P500, where the rise of a cluster of AI-linked names echoes the dot-com era.

Fixed income has been no exception, with sentiment improving markedly in May. Lower rated companies which had been shut out for long periods due to external shocks made the most of the window of opportunity for primary issuance, with even riskier names able to tap the market and restructure their debt into the future. Amid this somewhat counterintuitive market optimism, high-yield credit, which was very much aligned with investment grade from the beginning of the year, has started to offer better spreads – albeit for disproportionately greater risk.

FIG 1. GROSS HIGH-YIELD ISSUANCE BY RATING CATEGORY, YTD



Source: BNP, Lombard Odier as at 28 June 2023. For illustrative purposes only.

### Listen to the countermelody

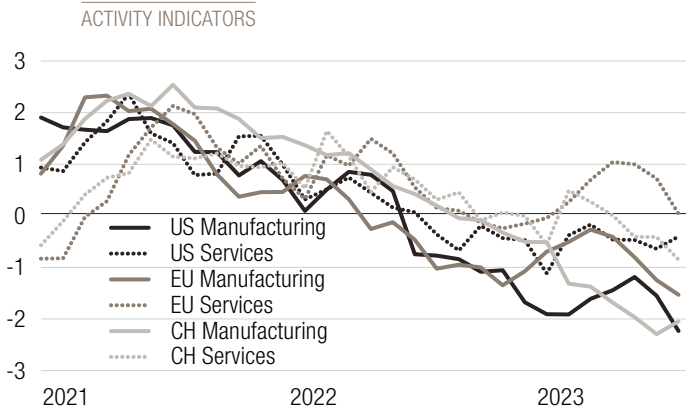
As a fixed-income investor, it would be tempting to simply join the party. However, to go back to Chuck Prince, it’s worth noting that his comment was prefaced with the words, “when the music stops... things will be complicated”. In our view that will indeed be the case, and since those dancing to the market’s current tune are not in control of the music, a certain degree of foresight is required.

We have seen plenty of situations like this in the past, where the optimism of market participants defies the downbeat macro scenario and scratching beneath the surface reveals plenty of reasons for caution. For example, while those AI-related stocks are soaring, many other sectors are trading cheaply; meanwhile, although high yield issuance is up, fallen angels in the real estate sector are also on the increase.

Sooner or later there will inevitably be a slowdown, at which point equity markets and risk assets such as high yield will come under pressure. The difficulty is that with so many factors affecting markets and a level of irrational exuberance in evidence, the timing and severity of that market shock is extremely hard to predict.

Despite a soft manufacturing sector, inflation has been more persistent than in past episodes. Our view is that the resurgent services sector – significantly boosted by both Covid-era stimulus and post-Covid demand, but lacking its pre-Covid workforce – has been a significant contributing factor. This has kept labour demand strong, pushing up wages and creating an inflationary effect.

**FIG 2. MACRO INDICATORS SIGNAL A SLOWDOWN IN ACTIVITY**



Source: Bloomberg as at June 2023. For illustrative purposes only.

Inflation could decelerate rapidly once consumer's Covid-era savings are depleted, reducing discretionary spending and bringing people back to work. Estimates suggest this is likely to happen sometime in the third quarter. However, evidence indicates that supply shocks in food, energy and labour have been the key inflationary drivers – second round effects have been slow to materialise and will still need to be digested at some point.

The ongoing problem for central banks is the lag of 12-18 months between any actions they take and their impact on the real economy. This means that a whole series of rate rises have been implemented before the consequence of earlier hikes has been felt, creating the inevitable risk of inadvertently engineering an excessive slowdown. With inflation finally starting to ease in the US, the Federal Reserve has at least been able to pause rate rises. But with the Eurozone slightly behind and experiencing broader based inflation, the European Central Bank (ECB) has committed to continuing its tight policy.

Given ongoing uncertainty in the macro environment, interest rates are likely to remain somewhat volatile, with some variation between countries and regions. The largest rate moves are now behind us, and we are at or close to the peak of the hiking cycle. However, there is a growing consensus that rates are unlikely to fall back significantly anytime soon, meaning that a plateau is likely to follow the peak. With US rates standing at 5-5.5% against a long-run neutral rate that was assumed as being 2.5% at the June meeting of the Federal Open Market Committee, the environment will almost inevitably become difficult at some point. Central banks are determined to fight inflation even at the cost of growth. That makes a hard landing entirely possible – and accepting a fixed return a sensible course of action.

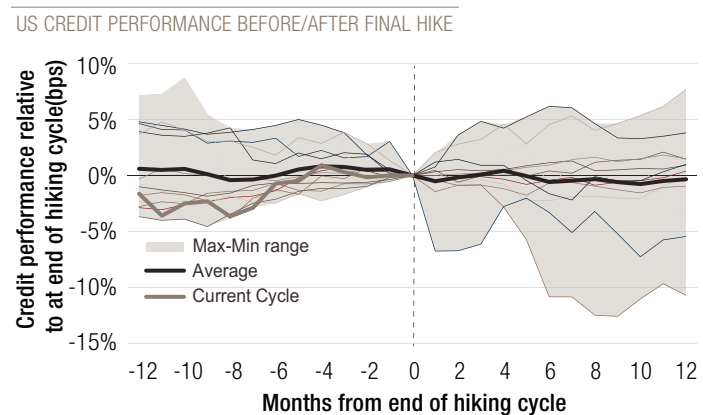
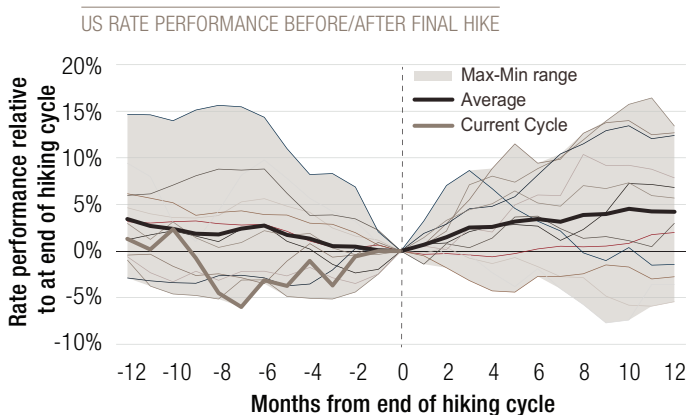
Having said all this, several factors mitigate the risk to corporates from any coming slowdown. Firstly, Covid has already shaken out some of the weakest names; secondly, the longstanding run of low rates means debt structure is longer term than in past economic cycles and the maturity wall less of an issue; and thirdly, as already mentioned, in recent windows even lower rated names have been able to refinance and make themselves less vulnerable.

**Be ready for the market to change its tune**

Taking all this into account, we aim to tread carefully, striking the right note between the extremes of bullish exuberance and permanent bearishness. This involves combining disciplined, diversified long-term strategic asset allocation with tactical plays to seek upside in instruments where risk is well-rewarded.

Timing the late part of the cycle, when the right move is to switch from spreads to rates, is always as much an art as a science. With so many mixed signals at a macro level, getting it right will be harder than ever. While market participants are tending to leverage up and add risk, with positioning in credit markets getting longer, it would not take a lot of adverse news for things to go the other way.

**FIG 3. PEAKING RATES TYPICALLY FAVOUR SOVEREIGN BONDS**



Source: Bloomberg as at June 2023. For illustrative purposes only.

Our position is that while you can appear to miss out a little in the short term by not remaining completely onboard with ongoing market exuberance, over a longer time horizon, a degree of pragmatism will pay off. It makes little sense to be the only guest at the party not dancing, but rather than just moving in time, investors need to be thinking about what will happen when the music stops. With this in mind, we are maintaining a prudent strategic asset allocation while capturing opportunities through tactical moves.

After a decade in exile, fixed-income carry is back, enabling a defensive exposure for when times get tough. It makes complete sense to build this into portfolios given the presence of macro risks – especially as peak rates approach. Using defensive carry to make the most of market positivity, rather than just dancing enthusiastically regardless of the song that’s playing, is the best way to make money consistently through the cycle and hit the bottom line in the long term.

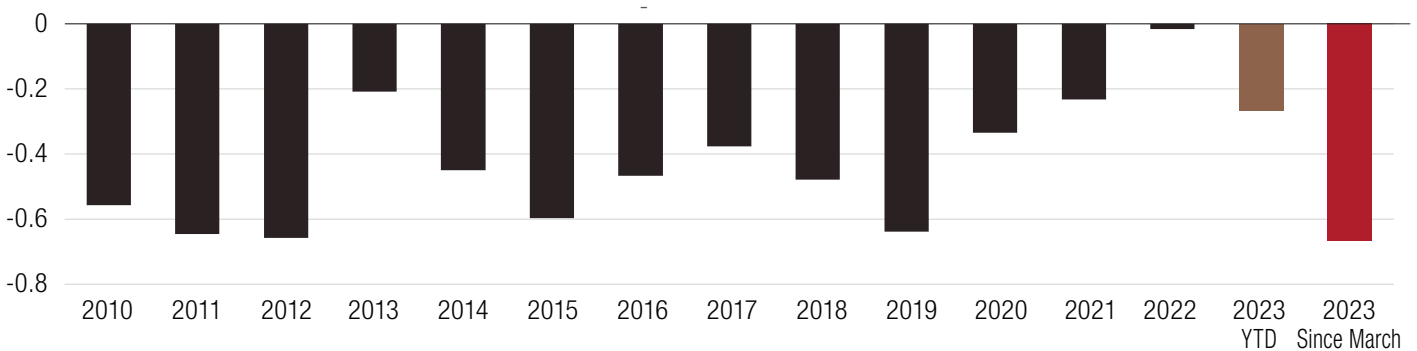
Our defensive carry approach means we are more neutral in the short term while remaining cautious over a longer-term time horizon. At the same time, we are keen on fallen angels, since compared

to high yield they offer interesting carry while providing downside protection. As already mentioned, a struggling real estate sector offers a strong opportunity in this respect (see the Corporate Credit section of this quarter’s *Alphorum* for more on this).

We are also starting to move into an overweight position for sovereigns, because rates can be expected to do well when the slowdown comes. What’s more, in the current environment, carry provides a return even before any slowdown is in evidence – with rates and credit no longer correlated, this exposure to duration is also a good diversifier (a topic we deal with in more detail in our Systematic Research section).

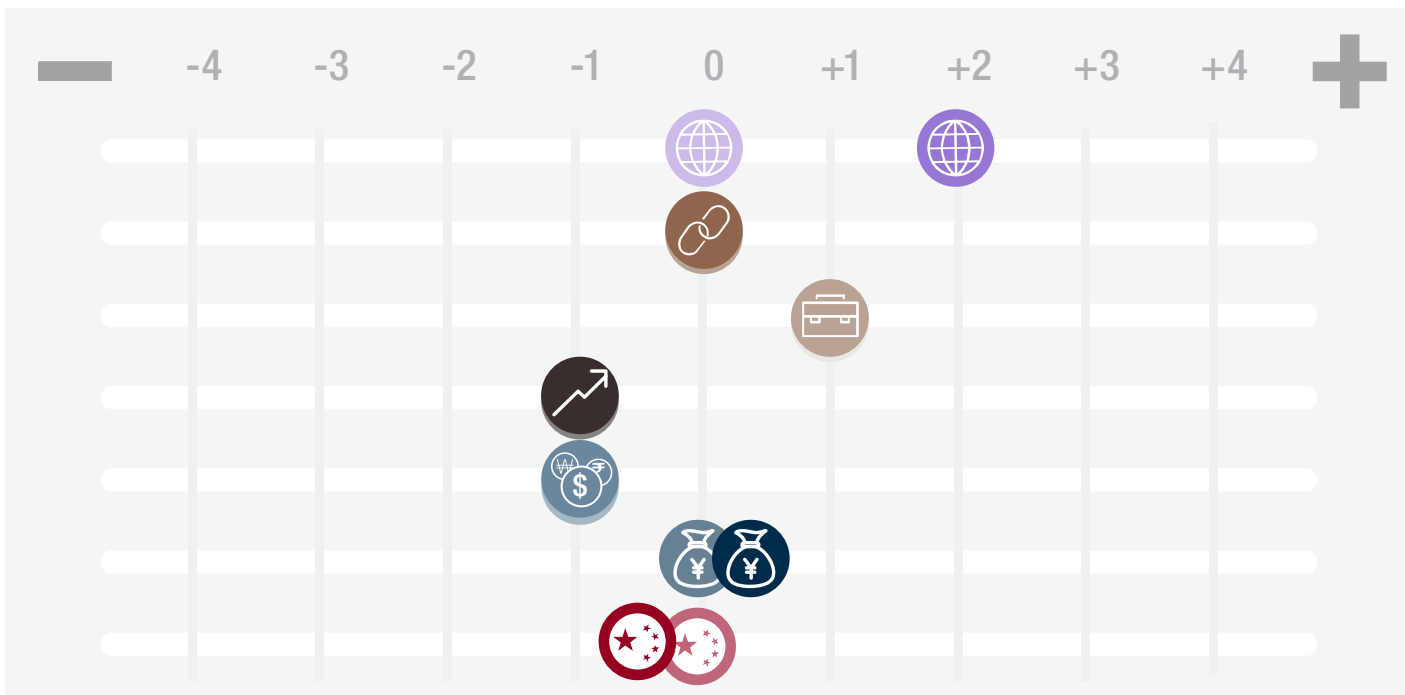
We have also taken advantage of opportunities in emerging-markets (EM) local-currency debt. When compared to past cycles, EM central banks have been far more proactive, raising rates earlier than developed-market central banks and maintaining confidence in local currencies. With inflation moving lower, real rates are positive and currency investors are staying onboard – this is reflected in good valuations from a currency perspective that add to the credit premium from spreads.


**FIG 4. NORMAL SERVICE: THE NEGATIVE CORRELATION BETWEEN RATES AND CREDIT IS BACK**




Source: Bloomberg, LOIM calculations as at June 2023. Past performance is not a guarantee of future results. Ratings may vary without notice. For illustrative purposes only.

# Convictions scorecard



**2 DM SOVEREIGN** 

Current yields, the approaching end of this tightening cycle and the restored diversification benefits of sovereign debt underpin our constructive outlook.

**-1 EM HARD CURRENCY** 


Emerging-market inflation issues are gradually being resolved and the growth differential remains positive, but we do not believe that spreads fully compensate for fundamental risks.

**0 INFLATION-LINKED** 

Our neutral view persists as break-evens offer protection against the risk of stubborn inflation pressures in the months ahead.

**+0.5 EM LOCAL CURRENCY** 


Our improved outlook is based on the attractive carry on offer and the performance of emerging-market currencies.

**+1 CORPORATE IG** 

We maintain our focus on high-quality issuers as earnings remain resilient and high issuance volumes continue to be absorbed.

**-0.5 CHINA LOCAL CURRENCY** 

Yields are no longer attractive relative to developed markets, but low correlations with other government-bond markets offer attractive diversification.

**-1 CORPORATE HY** 

Seeking spread pick-ups over government bonds, we are investing selectively, avoiding cyclically exposed sectors and companies with high energy needs.

Source: LOIM as at 28 June 2023. For illustrative purposes only.

# GLOBAL GOVERNMENT AND INFLATION-LINKED BONDS

Nic Hoogewijs, CFA  
Senior Portfolio Manager



## Sovereign drivers: peak rates and the revitalised diversification effect

### Need to know

- With the monetary policy stance of most major central banks now well into restrictive territory, there are signs the effects of tightening are starting to transmit to the real economy. But economic data remains firmer than expected
- The latest analysis indicates most developed economies should hit peak rates in H2 2023, albeit rates are likely to remain

elevated well into 2024. Historically, bond markets perform well when central-bank tightening peaks

- We see the return of the customary negative correlation between interest rates and risk premia as strongly positive for sovereign bonds, while the impact of high rates on other assets could also be supportive

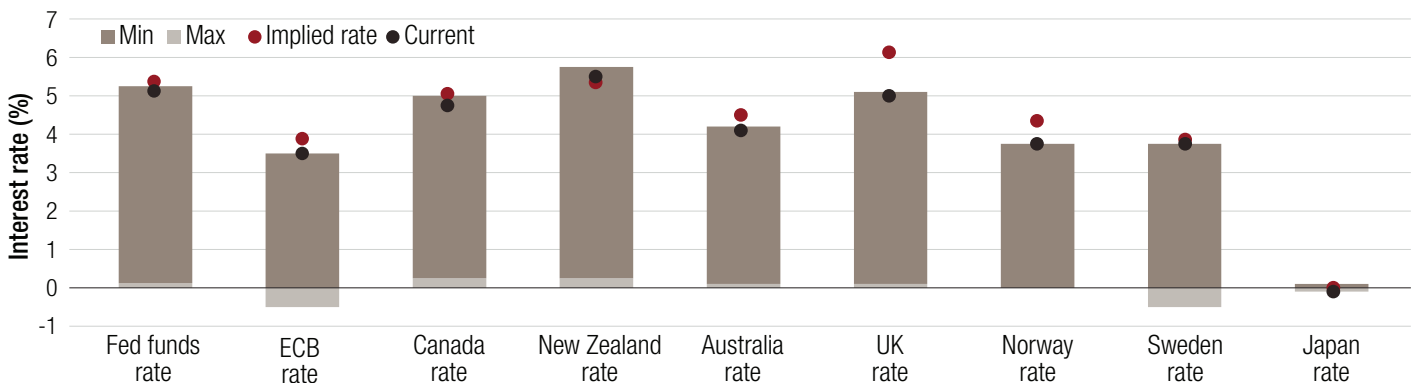
### Fundamentals and macro

After the fastest tightening cycle of the recent past, the monetary policy stance of most major central banks is now well into restrictive territory. Following on from the UK's liability-driven investing crisis in September 2022 and the collapse of major cryptocurrency exchange FTX in November, the March banking crisis left no doubt that this approach is starting to transmit to the real economy. Nonetheless, economic data published in Q2 remained firm, while inflation prints pointed to persistent underlying price pressures. Meanwhile, in the US a last-minute deal to raise the debt ceiling removed a significant tail risk that caused market nervousness in May, particularly at the very front end of the US Treasury Bill curve.

Central banks are looking to pause and gauge the transmission of restrictive monetary policy to the real economy. However, many will have little choice other than to tighten further and, as policy becomes more data dependent, rate moves are becoming less synchronised. The Fed paused in June (although it signalled further hikes may be needed), while the ECB continued hiking but [scaled down to 25 basis-point clips](#). In contrast, the [Bank of England](#) (BoE) and the [Norges Bank](#) accelerated their respective tightening cycles, with 0.5% hikes.

Overall, analysis comparing central banks' current rates with estimated forward rates and their historic ranges indicates that we are close to peak rates, which can now be expected in H2 2023 for most developed economies (see Figure 5).

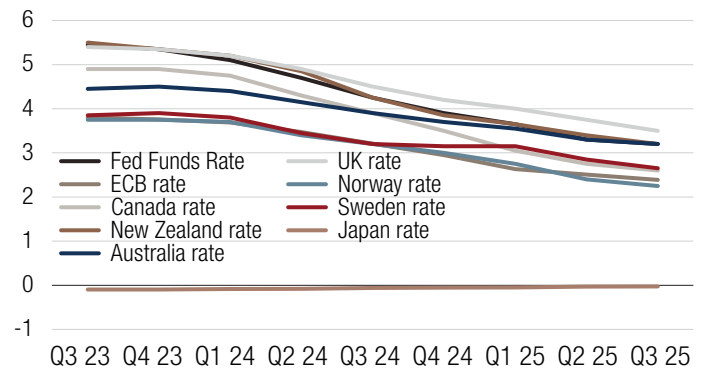
FIG 5. DEVELOPED MARKET CENTRAL BANK CURRENT AND IMPLIED RATES



The columns represent the range between the maximum and minimum rate of each country's/economy's central bank. The black dot represents the current rate of each country's central bank. The red dot represents the estimated forward rate. The idea is to show that we are close to a rate peak for most economies. Source: LOIM, Bloomberg as at 30 June 2023. For illustrative purposes only.

However, tight labour markets and sticky services inflation are set to keep some central banks, such as the BoE, in a tight spot, even as headline inflation falls in the coming quarters. The chart below shows forecast policy rates for developed economies over the next two years.

**FIG 6. AVERAGE POLICY RATE FORECASTS BY BLOOMBERG ECONOMISTS**



Source: Bloomberg as at 30 June 2023. For illustrative purposes only.

## Sentiment

Fixed-income markets have remained volatile in 2023, with the two-year US Treasury yield trading in a wild range from 3.8% to 5.05%. High uncertainty is also reflected in metrics such as the options implied volatility for the 1y1y US swap rate, which continues to trade close to a two-decade high.

Historically tight labour-market conditions and persistent inflation triggered an additional repricing of policy-rate expectations, with the expected federal funds rate at year-end [rising from 4.5% to 5.3%](#). Repricing was led by the front end, with the yield curve inverting back to the extreme levels seen just before the March banking crisis.

The uncertain economic outlook and reactive central-bank policies have resulted in mediocre year-to-date performance for sovereign fixed income. Having ended the first quarter of the year in positive territory (helped by the flight-to-quality caused by the banking-sector crisis), global sovereign-bond markets posted modestly negative returns in Q2, underperforming money-market funds. However, looking ahead, with central banks intent on anchoring inflation expectations, we see value in the historically elevated sovereign-bond yields on offer in major developed markets.

## Technicals

Seasonality tends to be supportive over the summer for sovereign-bond markets. However, the technical picture remains challenging – particularly in the UK and Europe, where fiscal deficit spending and quantitative tightening have boosted net supply to multi-year highs. We think elevated market volatility is partly a reflection of this supply/demand imbalance. In June, UK long-end interest rates traded a whisker away from the levels that triggered the BoE's emergency intervention in the gilt market in September 2022.

In the US, Commodity Futures Trading Commission data indicate speculative investors are running underweight duration positions, which we typically see as a contrarian indicator. Still, historically elevated yields remain supportive of demand – including renewed interest from retail investors, whom J.P. Morgan estimates have made net purchases of over USD 207 billion in bond funds year-to-date.<sup>1</sup>

<sup>1</sup> "Flows & Liquidity." Panigirtzoglou, N. et al. J.P. Morgan Global Markets Strategy, 22 June 2023.

## Valuation

At the end of the second quarter, market pricing implied that policy rates for the Fed, ECB and BoE would peak at about 5.25%, 4% and 6% respectively. However, elevated policy rates are expected to be held until Q2 2024 in the US and Eurozone, and well into H2 2024 in the UK.

Years of experimenting with modern monetary theory have created uncertainty around the effectiveness of policy transmission mechanisms. However, while evidence of the impact of monetary tightening has been slow to appear, the effectiveness of channels

such as mortgage market lending in slowing down demand should start to gain momentum, helping central banks regain control over inflation.

At current levels, we are constructive on sovereign interest-rate exposure. While heavily inverted curves prevent investors locking in elevated money-market rates for the long term, policy rates are so high that even with heavily inverted yield curves, long-term rates are historically attractive.

## Outlook

As we anticipated in "[The corporate bond is back](#)," in November 2022, the negative correlation between interest rates and risk premia has returned in 2023, revalidating sovereign bonds as a diversifying asset. In our view the situation in 2022, when accelerated monetary tightening weighed on performance across asset-classes, is unlikely to be repeated.

Fallout from the impact of high rates and other market stresses could also be supportive of sovereign performance. Commercial

real estate is particularly vulnerable (see our Corporate Credit section for more on this), while the UK mortgage market is causing concern as an increasing number of households face renewing their borrowing at vastly increased cost. What's more, bond markets have historically performed well from the point when central bank tightening peaks. While the impact of high rates can be heavy in the real economy, the end of hiking cycles typically bodes well for government bonds.



# CORPORATE CREDIT

## Shifting sands for real estate?

Ashton Parker  
Senior Portfolio Manager and  
Head of Credit Research



### Need to know

- As portfolio values fall and interest rates stay high, concerns over weakening financial metrics and the ability to refinance existing debt is driving ratings downgrades in real estate, leading to an increase in fallen angels
- While some real-estate subsectors face an uncertain future, many firms' high-quality assets and inflation-linked rents mean

they can sell assets and access alternative financing such as the bank-loan market to service debt

- We therefore believe many real-estate fallen angels will be able to continue to operate within the BB space, and see this sector as a key focus for our Fallen Angel strategy over the next two years

In the [Q2 2023 edition of Alforum](#), we anticipated tighter lending conditions to further weaken credit fundamentals, increase ratings drift and result in more issuers being downgraded from investment grade to high yield. That scenario is now starting to play out in the real-estate sector, where we have seen a number of [fallen angels](#), or bonds newly downgraded below BBB-, appear in the first half of the year. And we expect more to come.

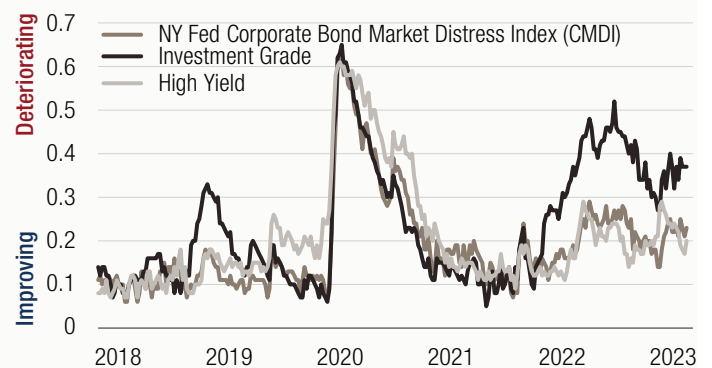
Here we explore the situation in real estate to understand why the sector is particularly vulnerable, what issuers are doing to try to mitigate the impact on their ability to borrow, and consider the implications are for fixed-income investors.

### Double jeopardy: why high interest rates are twice as problematic for real-estate firms

With interest rates continuing to rise in most jurisdictions, businesses in all sectors face higher costs for refinancing. However, for property companies the problem is twofold, since higher interest rates also reduce property valuations. Rating agencies consider two metrics when assessing the financial profile of a property company: loan-to-value and interest cover. A rising-rate environment reduces the value of the portfolio and over time increases interest cost, weakening both metrics (absent debt reduction and increased rent roll). This has put real-estate businesses under negative rating pressure.

The problem has been further exacerbated by the market's reaction, which has made it materially more expensive to refinance unsecured bonds from real-estate issuers than similarly rated issues in other sectors. This has led to concerns that real-estate companies may not be able to refinance upcoming debt maturities, creating a vicious circle of negative sentiment and

FIG 7. DISTRESS IN CORPORATE-BOND MARKETS



Source: Bloomberg as at June 2023. For illustrative purposes only.

eventual ratings downgrades. The result is an increase in the number of fallen angels in the sector.

We believe market concerns about real estate as a whole are overdone. Operations remain robust for many issuers, with rent rolls linked to inflation in some way, and occupancy levels are often more than 90% and relatively stable. Meanwhile, firms have much of their debt in fixed rates, and have raised equity and disposed of assets to reduce debt. What's more, their high-quality assets mean they have access to the secured bank-debt market to support refinancing. So, while diligent fundamental analysis on each issuer remains paramount to ensure we avoid falling knives – downgraded bonds with scarce prospects for price recovery – we believe the sector will be a source of opportunities for our [Fallen Angel Recovery](#) strategy over the next two years.

Although the environment is challenging for real estate in general, some sectors and regions are more vulnerable than others. Issues in the Swedish real-estate sector have generated headlines in recent months, while non-prime bricks-and-mortar retail is a subsector we have always shied away from. However, we are most cautious on US office real estate: with working from home now part of the mix in the wake of the pandemic, property utilisation rates for offices in many US cities are as low as 50%. Add occupiers' ability to give the keys back and walk away more easily and the risks start to outweigh the benefits.

Lifestyle choices directed towards better housing but longer commutes make working from home equally popular in the UK (but less so in mainland Europe). While the impact of this trend has yet to be reflected strongly in occupation rates, commercial office space is almost certainly entering a phase of slow scaling down. In this respect, [HSBC's decision](#) not to renew its Canary Wharf lease in 2027 may be a sign of things to come.

#### Hybrid theory: issuers get technical to manage their borrowing costs

Ongoing poor performance and volatility is resulting in some intriguing technical developments in the corporate hybrids space. One example is EDF's recent issuance of a dollar-denominated hybrid with no coupon step. The aim of this tactic is to avoid the issue losing equity credit at Standard & Poor's at the first call date – thereby removing one of the key drivers for the bond to be called. This provides a clear benefit to the issuer in supporting the capital structure of the company, at the same time leaving it less exposed to the vagaries of the market when the call date is approaching.

EDF estimate the tactic cost them around 75bps, and while potentially disadvantageous to investors, with a decade until the first call date most seem happy to receive the higher coupon. For our part, we will be monitoring this innovation carefully in the hope it is not adopted more widely. While hybrids generally price to first call, we consider it more prudent to price this new instrument to perpetuity.

A second innovation came from high-quality property company Unibail-Rodamco-Westfield.<sup>2</sup> With their hybrid due for call this summer, the company made it clear they would not call the bond,

offering to compensate investors by giving them the chance to [exchange the existing hybrid](#) for a new hybrid with a five-year call date and a higher coupon instead. The coupon on the existing hybrid would increase to around 5% after the first call date, while the new hybrid offers a coupon of 7.25% (with a yield approaching 10%) – it was therefore no surprise that almost all investors accepted the exchange. Overall, this approach seems a reasonable compromise for companies seeking to balance their own financial needs with those of their investors during this tricky period.

#### Firm foundations: why good real estate is still a solid buy

Despite the difficult environment for real-estate firms, the collateral damage caused to high-quality names in the sector by generalised negative sentiment means that there are pockets of value to be found. Overall, real estate looks cheap, with senior debt particularly attractive for companies that have solid liquidity, giving them plenty of time to address refinancing and for the market to stabilise.

Demand for greener real estate, designed for energy efficiency with features such as solar panels and effective insulation, will be particularly resilient. As tenants consolidate their real-estate resources, these properties will be kept on in preference to older, less energy-efficient premises, as part of companies' measures to reduce their carbon footprint. In the long term, property companies whose portfolios focus on environmentally friendly assets should also benefit from cheaper borrowing. In contrast, sector laggards may face higher barriers to access credit, as ratings agencies and thus investors increasingly factor in the cost of upgrading inefficient properties to companies' balance sheets.

Real-estate firms with strong portfolios possess quality assets, giving them a range of options to maintain liquidity without resorting to an expensive bond market. Properties can be disposed of outright, third parties given a partial stake or loans secured via local banks. Most real estate companies have a list of assets for sale, but little forced selling is in evidence and prices are at or only slightly below book value. Firms also seem able to access the secured loan market – one example is Czech firm CPI Property Group<sup>2</sup>, which [recently secured](#) EUR 494 million in bank loans in preference to issuing bonds.

<sup>2</sup> Any reference to a specific company or security does not constitute a recommendation to buy, sell, hold or directly invest in the company or securities. It should not be assumed that the recommendations made in the future will be profitable or will equal the performance of the securities discussed in this document.

**Implications: fertile ground for fallen angels**

The awkward environment for real estate demonstrates the value being a downgrade-tolerant active manager. While investment grade funds are forced to sell even those names with relatively sound fundamentals, we can be downgrade agnostic and make our own assessment of risk. So, for example, while in the current market we prefer senior real estate debt, we are prepared to purchase hybrids where pricing to maturity indicates a good buy.

For our Fallen Angels Recovery strategy, downgrades are actually beneficial. The more downgrades there are, particularly within

the same sector, the more oversupply. When coupled with limited demand, this results in even more excessive price movement and therefore more opportunity.

As downgrades increase in the real-estate sector, we are adding many of the names to our Falling Angels portfolio<sup>2</sup>. Recent additions include Swedish firms Fastighets AB Balder and SBB, while an exception is German residential property company ADLER Real Estate AG, which we had previously identified as a falling knife. The nature of the fallen angels price-recovery process means performance from these additions is likely to be delivered in 2024.

# SUSTAINABLE FIXED INCOME

## Labelled bonds: the state of play in H1

Erika Wranegard  
Portfolio Manager



### Need to know

- Despite periods of weaker sentiment following the spring banking crisis, the labelled fixed-income market held up well. At USD 717.1 billion, issuance in H1 was slightly below the volume recorded for the first half of 2022
- The slight decline reflected lower issuance of sustainability-linked loans as banks tightened overall lending standards.

This was countered by record green-bond issuance, which was up 19% year-on-year

- Sovereign green debt was a key driver of volumes, including inaugural issuance from Israel, Turkey and India. Strong future growth can be expected, with Japan a further prospective market entrant

Recent issues of *Alphorum* have looked at how climate-related initiatives in both the US and Europe are creating a [positive environment](#) for sustainability-related issuance in credit markets. This time, I want to focus on levels of issuance in labelled fixed income and, in particular, the growth in issuance of sovereign green debt.

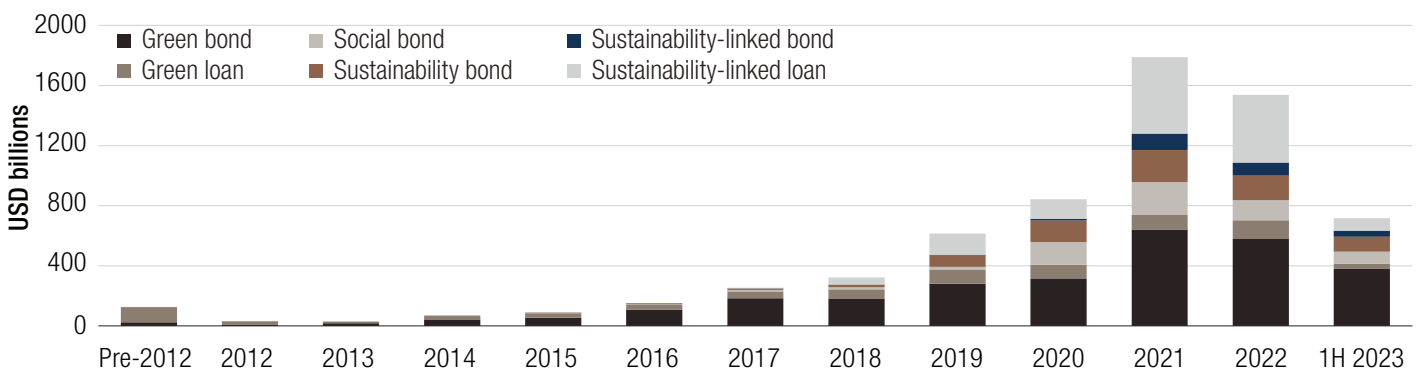
### Healthy issuance despite fluctuating sentiment

Overall, the labelled fixed-income market saw strong issuance in the first half of 2023, despite a period of weaker financial sentiment caused by turmoil in the US banking system and the forced takeover of Credit Suisse (see Figure 8).

Figures from BloombergNEF show that total global issuance across all labelled bond instruments (including green-, social-, sustainability- and sustainability linked-bonds, plus sustainability-linked loans) reached USD 717.1 billion in H1 2023. This was slightly below the USD 838 billion issued during the first half of 2022, but is still a healthy rate of issuance given the macro environment (see Figures 8 and 9).

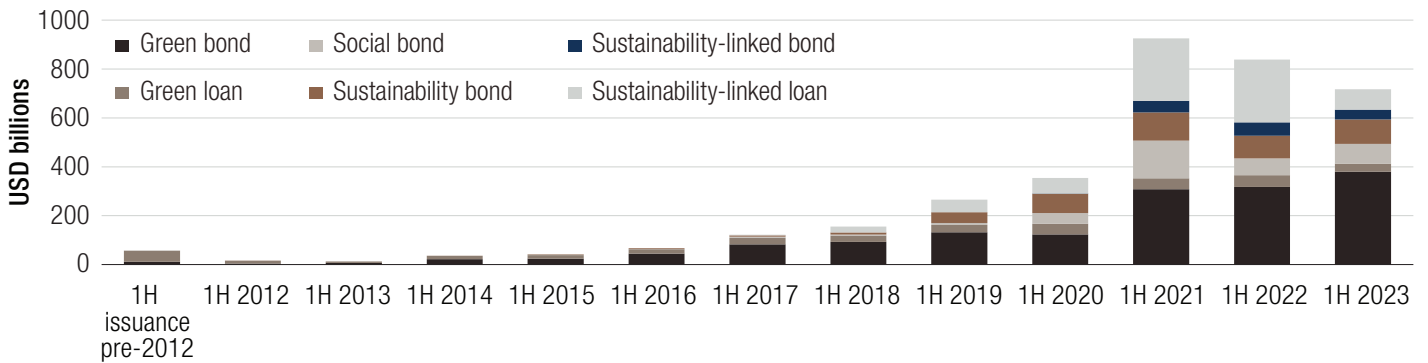
Looking more closely at subsets of the market, it becomes apparent that the decline in total labelled fixed-income issuance was driven by the lower issuance of sustainability-linked loans. This is not altogether surprising, given that banks have tightened lending standards across their loan portfolios in the wake of the banking sector turbulence in March.

FIG 8. ANNUAL LABELLED FIXED-INCOME MARKET ISSUANCE OVER TIME



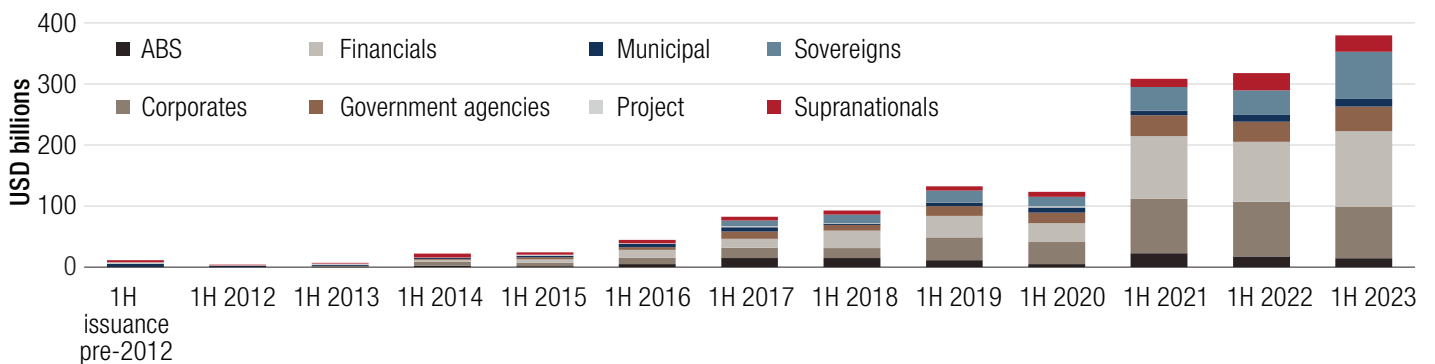
Source: BloombergNEF at June 2023. For illustrative purposes only.

**FIG 9. H1 LABELLED FIXED-INCOME MARKET ISSUANCE OVER TIME**



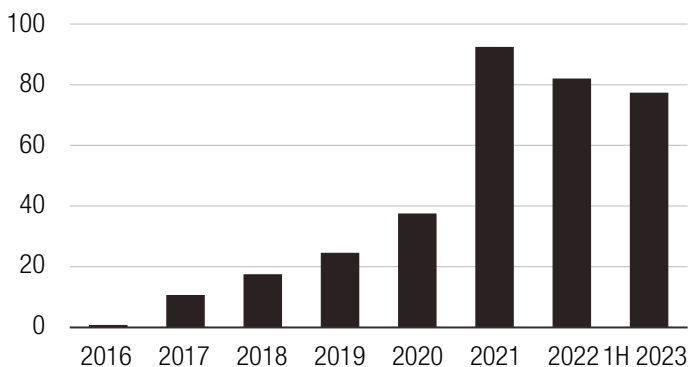
Source: BloombergNEF at June 2023. For illustrative purposes only.

**FIG 10. H1 LABELLED FIXED-INCOME MARKET ISSUANCE OVER TIME, BY ASSET TYPE**



Source: BloombergNEF at June 2023. For illustrative purposes only.

**FIG 11. COMPARISON OF H1 2023 SOVEREIGN GREEN BOND ISSUANCE (IN USD BILLIONS) WITH PREVIOUS FULL YEAR ISSUANCE**



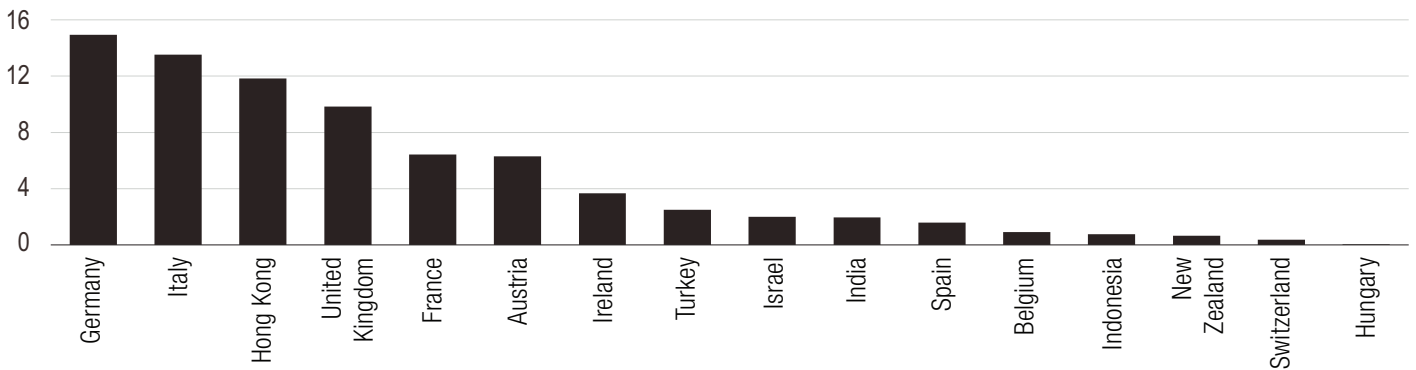
Source: BloombergNEF at June 2023. For illustrative purposes only.

**Green bonds: strength to strength**

Countering the decline in issuance of sustainability-linked loans, green bonds saw record issuance in the first half of 2023 with an impressive 19% increase over the same period in 2022. The major driver of larger issuance volumes was the growth in sovereign green debt. At USD 77.35 billion, issuance volumes for sovereign green bonds in the first half of the year were almost in line with the full-year issuance of USD 82 billion in 2022 (see Figure 11).

Past issuers came back to the market in force, issuing large volumes. Germany was the largest issuer in terms of volume, raising close to USD 15 billion via green sovereign bonds in the first half of the year. It was closely followed by Italy, which tapped the market for the equivalent of USD 13.5 billion. France, another repeat issuer in the market, indicated earlier in the year it aimed to [raise EUR 11 billion](#) in sovereign green bonds. As at 30 June 2023, it had already issued more than the equivalent of USD 6 billion.

**FIG 12. SOVEREIGN GREEN BOND ISSUANCE IN H1 2023 BY ISSUER**



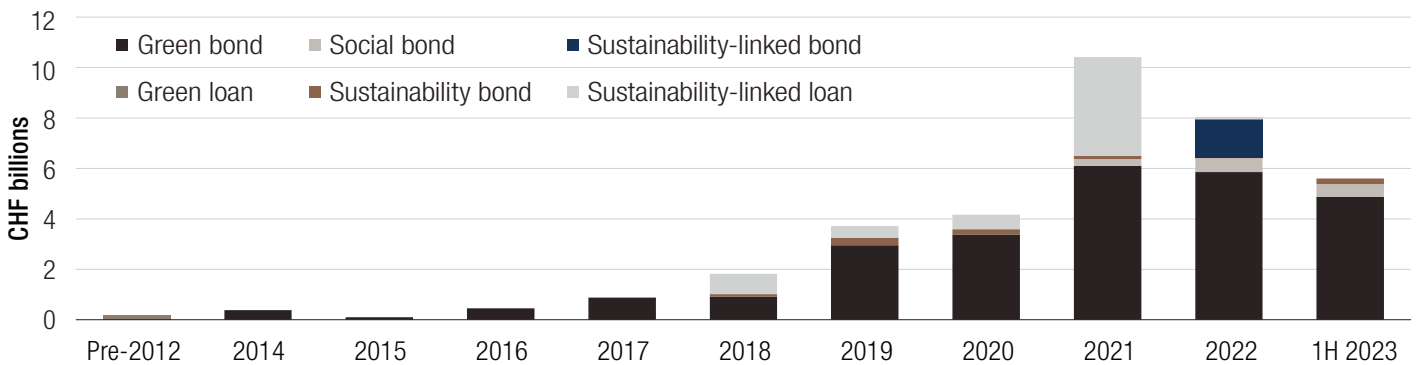
Source: BloombergNEF at June 2023. For illustrative purposes only.

While not one of the biggest hitters by size, growth in the Swiss labelled fixed-income market surpassed global trends with record issuance volumes in the first half of the year. Similar to the global labelled-bond market, green bonds are driving this growth. Green-bond issuance in Swiss francs in H1 almost matched the full-year issuance in 2022, and represented a 98% increase on the same period in 2022, with both newcomers and repeat issuers taking the opportunity to tap the market.

It is concerning that global issuance volumes for labelled fixed income in US dollars for H1 are down year-on-year when compared to the same period in previous years. However, despite the large decrease in sustainability-linked loans worldwide, it is reassuring to see the volumes of green bonds, sustainability bonds and social bonds are all in line with 2022 levels.

Finally, for the overall market, aside from the large issuance volumes and return of repeat issuers, another encouraging sign was debut green-bond issuance from several sovereigns, including Israel, Turkey and India.

**FIG 13. COMPARISON OF 1H 2023 SWISS FRANC LABELLED-BOND MARKET WITH PAST ANNUAL ISSUANCE**



Source: BloombergNEF at June 2023. For illustrative purposes only.

**Case study<sup>3</sup>: India's inaugural sovereign green bond issue**

Rapid industrial development and a booming population made India the world's [third-largest emitter](#) of greenhouse gases in 2021, despite GHG emissions per capita being [well below](#) the global average. The country's vulnerability to climate change impacts means it is already [experiencing the consequences](#) of global warming – fortunately, it is starting to act to redress the balance.

Despite not aligning itself with the Paris Agreement (the country is targeting net zero in 2070 rather than 2050), India has set climate-related goals, including a [45% reduction in emissions intensity](#) by 2030 and an increased share of non-fossil fuel energy. Having originally launched its National Action Plan on Climate Change in 2008, the country has made significant progress in installing renewable-energy capacity installations, [ranking fourth globally](#) in 2022 after China, the US and Germany.

Going forward, India will need to balance its climate goals with delivering the energy needs for continued economic growth, along with the electricity consumption of more than 1.4 billion people. The Indian government's recent [National Electricity Plan](#) (NEP) sets out how this will be achieved in some detail.

India's position as one of the largest renewable-energy markets presents attractive opportunities for investors seeking to support green projects. To finance the investments required to meet its clean-energy targets and continue its transition away from fossil fuels, India issued its inaugural sovereign green bond on 25 January 2023. The issuance was well received, with a total value of INR 80 billion (USD 1 billion) issued in five- and 10-year green bonds.

The issuance provided a 'greenium' for the Indian government by providing a lower cost of borrowing compared to conventional bonds: the coupon of 7.29% for the 10-year bond was [0.06 percentage points lower](#) than comparable sovereign debt, indicating investor confidence in India's commitment to green projects.

Use of proceeds from India's green-bond framework focuses on a range of categories that address crucial environmental challenges while promoting sustainable development and climate-risk mitigation. These include decarbonised transport, climate-change adaptation, water and waste management, pollution prevention and control, and biodiversity conservation.

While this is highly positive, it's important to note that India's continuing reliance on coal power is a handicap to its net-zero ambitions. Plans for increased domestic coal production and the construction of [new coal-power capacities](#) between 2027 and 2032 outlined in the NEP contradict the country's sustainability goals. Additionally, India aims to increase its imports of liquefied natural gas.

Despite these reservations, India's inaugural sovereign green-bond issuance marks a significant milestone in achieving its climate goals and attracting investment for sustainable development. The greenium achieved for its debut issuance demonstrates investors' interest in financing India's transition, and increased participation in green-bond issuance will hopefully accelerate the country's progress toward its net-zero targets.

Given the country's ambitions for economic development and its ongoing population growth, India's success in decarbonising its economy is crucial for achieving global climate goals.

**Outlook for the labelled-bond market**

Overall, we continue to expect the labelled-bond market to continue to grow strongly. The sovereign green-bond market in particular has significant potential and additional supply is welcome. Encouragingly, Japan is reported to be considering an [inaugural offering](#) in the H2,

with the launch of a 'transition' bond to help finance efforts supporting the country's 2030 and 2050 carbon-reduction goals. Switzerland's [recent vote](#) to accelerate national net-zero targets should support continued strong growth in the Swiss franc-denominated market for labelled bonds over the coming years.

<sup>3</sup> Important information on case studies: the case studies provided in this document are for illustrative purposes only and do not purport to be recommendation of an investment in, or a comprehensive statement of all of the factors or considerations which may be relevant to an investment in, the referenced securities. The case studies have been selected to illustrate the investment process undertaken by the Manager in respect of a certain type of investment, but may not be representative of the Fund's past or future portfolio of investments as a whole and it should be understood that the case studies of themselves will not be sufficient to give a clear and balanced view of the investment process undertaken by the Manager or of the composition of the investment portfolio of the Fund now or in the future.

# SYSTEMATIC RESEARCH

## Diversifying carry: harnessing the negative credit-rates correlation

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### Need to know

- The current bond-market environment, in which cash rates are high and yield curves are inverted, has important implications for fixed-income asset allocation
- While the return of yield has been a welcome development, yields relative to risk-free cash rates – which we will refer

to here as carry – are only positive at the lower end of the rating spectrum

- On top of negative carry, inverted yield curves expose Treasuries to negative rolldown. However, given the return of negative correlations between rates and credit, we argue that Treasuries still offer vital diversification in fixed-income portfolios

Recent editions of *Alphorum* have focused on how [late-cycle dynamics generate fallen angels](#), and their potential to enhance the performance of an investment-grade portfolio as a [hedge against downgrade-triggered selling](#). This time, we are going to consider the wider implications for fixed-income asset allocation in the current bond-market environment, in which the negative correlation between rates and credit has returned while yield curves are inverted.

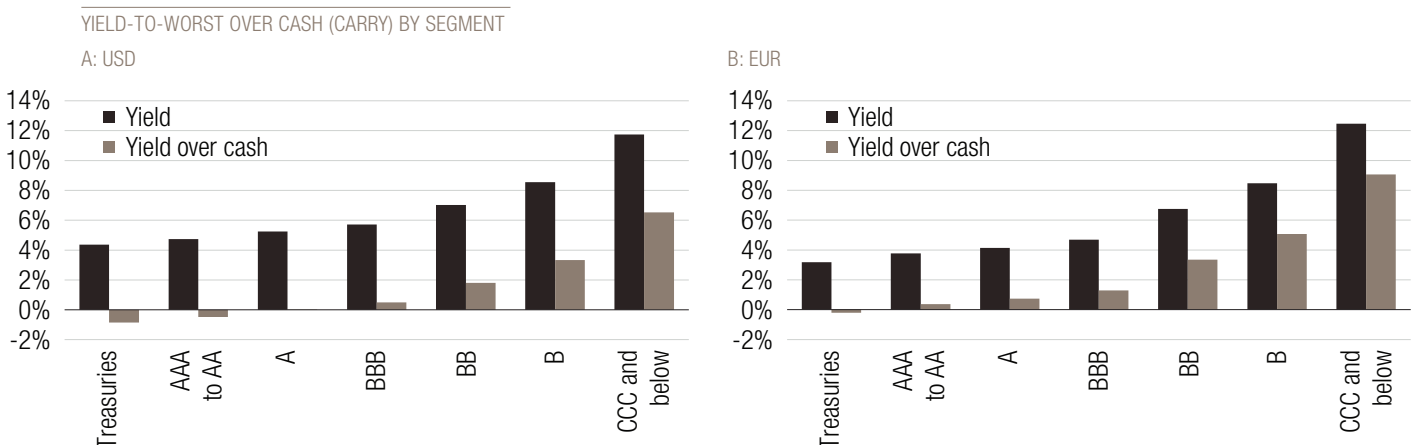
### Putting yield in perspective

At a superficial level, the return of yield in all corners of the fixed-income market after over a decade of negligible opportunities looks

highly positive for bond investors. However, for asset allocation, yield levels relative to risk-free cash rates – which we will refer to in this piece as carry<sup>4</sup> – are far more important.

A closer look shows that despite yields being elevated, carry as defined in this way is only positive lower down the rating spectrum (see Figure 14). Essentially, while yield levels have normalised, higher risk-free cash rates mean that carry is much lower than historical averages. For government bonds and high-rated corporate credit, the carry on offer is actually negative.

**FIG 14. YIELD VERSUS CARRY BY FIXED-INCOME SEGMENT**

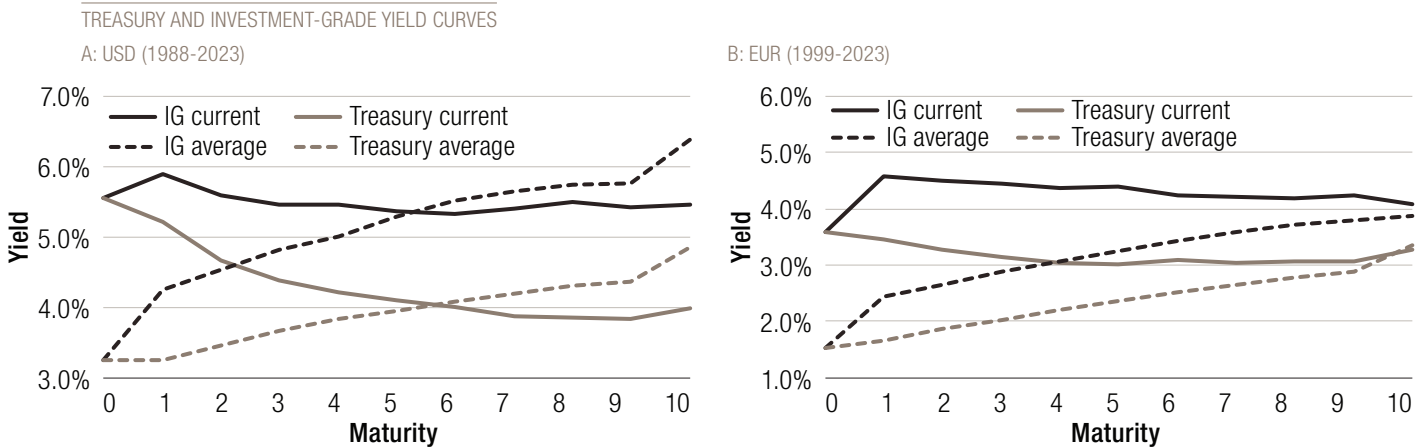


Source: Bloomberg, LOIM Calculations. 1-month OIS swap rates used for cash yield. Note: in this analysis, we define carry as the yield relative to the risk-free rate. For illustrative purposes only.

<sup>4</sup> In this piece we define carry as yield over cash. Other definitions combine rolldown into carry, however here we consider them as separate components for ease of flow.



**FIG 15. CURRENT VERSUS AVERAGE YIELD BY MATURITY OF INVESTMENT GRADE AND TREASURY BONDS**



Source: Bloomberg, LOIM Calculations. As at June 30, 2023. For this analysis, we use German bonds as the Euro Treasury curve to remove sovereign credit spread effects across the curve. For illustrative purposes only.

**Why curve inversion matters**

The ultimate cause of this negative carry is the sharp inversion of rate curves. Over the course of the hiking cycle, the excess return of fixed-coupon government bonds over the cash rate, known as the term premium, has turned vastly negative. This has created an environment where investors are essentially paying to take on duration risk. While spreads compensate for this to a degree, it still leaves the corporate investment-grade yield curve flat (see Figure 15).

On top of the negative carry, this leaves Treasuries exposed to negative ‘rolldown’. This is defined as the return generated under the assumption that spot prices converge to forward prices: in other words, the return that would be realised if the yield of a bond progresses as laid out by the current yield curve.

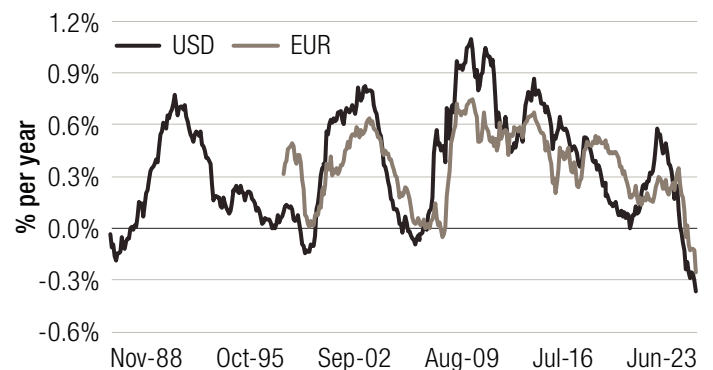
When yield curves slope upwards, rolldown is positive since the yield progressively falls as the bond moves through its lifespan. In the current environment, the rolldown effect is negative for Treasuries, at about -25 bps per year in Europe and -35 bps in the US (see Figure 16). When combined, the total negative impact of carry and roll is almost -0.5% in Europe and as much as -1.2% in the US at an index level.

**Where does duration fit?**

Assessing the benefits of duration purely from the perspective of carry and rolldown makes it appear unappealing. However, carry and rolldown as measured in this way are static, point-in-time measures, and are not necessarily representative of actual forward-looking returns. Indeed, cash levels are not expected to be at the very high levels they are at now for the duration of the curve, and a declining cash rate will likely reduce the advantage of cash over fixed-coupon assets.

We argue that duration still very much holds a vital place in fixed-income asset allocation due to its diversification properties.

**FIG 16. AVERAGE ROLLDOWN OF US AND GERMAN GOVERNMENT BOND INDICES OVER TIME**



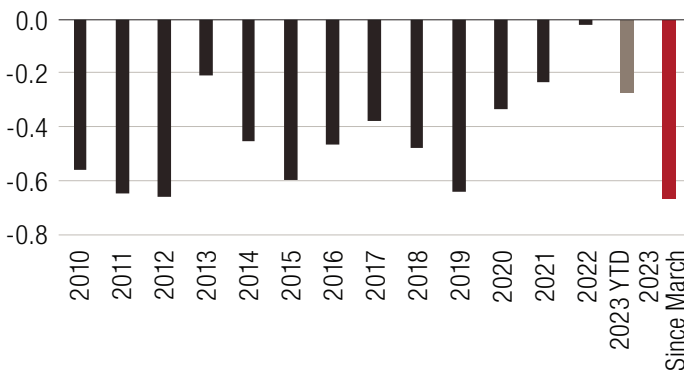
Source: Bloomberg, LOIM Calculations. Rolldown calculated as amount-outstanding-weighted average of one-year maturity buckets up to 10-year, then five-year buckets up to 30-year. For illustrative purposes only.

The correlation between credit spreads and duration turned positive in 2022 – after decades of a strong negative relationship – resulted from the sharp repricing in real rates and is consistent with inflation’s recent dominance of the macro environment. In contrast, in a typical growth-driven macro scenario, correlations between credit and duration are negative and the diversifying properties of rates are clearly in evidence.

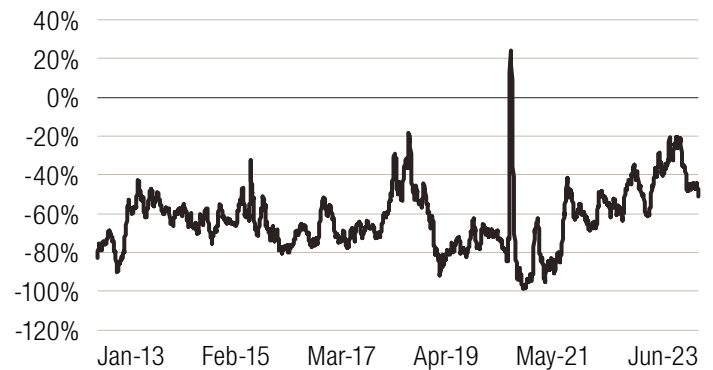
In fact, there is both empirical and forward-looking evidence that achieving diversification through credit and rates exposures has already returned. As shown in Figure 17A, last year’s positive correlation has reversed quite sizably in 2023, shifting particularly strongly since the banking issues in March. Meanwhile, Figure 17B shows the expected forward-looking correlation using the exchange-traded-fund (ETF) options market. As you can see, this measure also points to a return of low correlations that is consistent with the pre-Covid trend.

**FIG 17. CORRELATIONS BETWEEN US CREDIT AND DURATION**

A: WEEKLY CORRELATION OF US 10-YEAR TREASURY YIELD AND US HIGH-YIELD SPREAD CHANGES



B: IMPLIED CORRELATIONS FROM ETF OPTIONS



Source: Bloomberg, LOIM Calculations as at June 2023. Implied correlations are calculated using daily implied volatilities on three-month options for iShares US rates and credit ETFs (IEF and HYG). Correlations are calculated with a half-life of five days. For illustrative purposes only.

**Asset allocation for negative correlations and an inverted curve**

To understand the asset-allocation implications for an environment with an inverted yield curve and a negative correlation between credit and rates, we ran an asset-allocation scenario with a barbell exposure featuring high-yield corporate bonds and Treasuries. To estimate forward-looking returns for bonds, we used the following method:

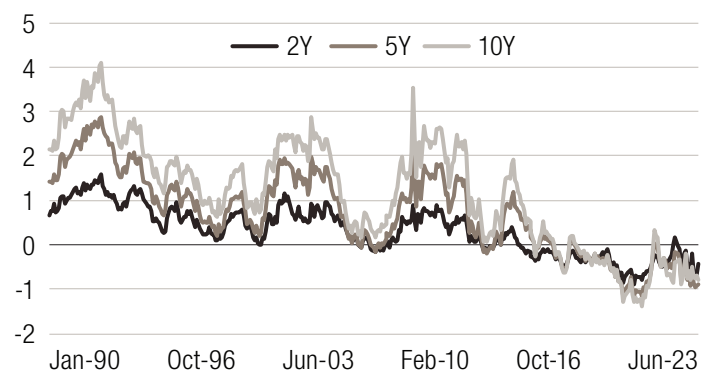
$$\text{Expected Return Over Cash} = \text{Term Premium} + \text{Credit Premium}.$$

Note that expected returns can differ from the carry and roll-down measures discussed above if the cash rate declines over time. Indeed, if cash follows the rate path implied by the market, then the returns of fixed-coupon Treasuries over cash is zero. This would mean that the excess compensation for extending the 'term', which we refer to as the term premium, would be zero. However, the empirical evidence shows that the term premium is both non-zero and highly dynamic.

The **term premium** is a measure of the excess return of a fixed-coupon government bond over the risk-free cash rate, and provides compensation for the uncertainty created by moves in inflation and real rates. It should be noted that there are situations in which the term premium can be negative, either to reflect the diversification benefits of Treasuries or from a demand-supply mismatch.

There are a number of ways to estimate term premium, but a well-known method is the Adrian, Crump and Moench (ACM) model, which empirically determines how the shape of the yield curve translates into an excess return. Based on the ACM model, the term premium is negative at the two, five and 10-year points, indicating that interest rates are likely to be higher than is implied by the curve inversion – especially at the long end. This is consistent with the carry story, although the magnitude is somewhat less.

The **credit premium** is a measure of the excess return of a fixed-coupon, credit-risk asset – such as a corporate bond – over risk-free, fixed-coupon bonds like Treasuries. The credit premium compensates

**FIG 18. US TERM PREMIA ESTIMATES SINCE JANUARY 1990, BASED ON THE ACM MODEL**

Source: Bloomberg, New York Fed as at July 2023. ACM model sourced from Tobias Adrian, Richard Crump, Benjamin Mills, and Emanuel Moench, Liberty Street Economics, May 2014. For illustrative purposes only.

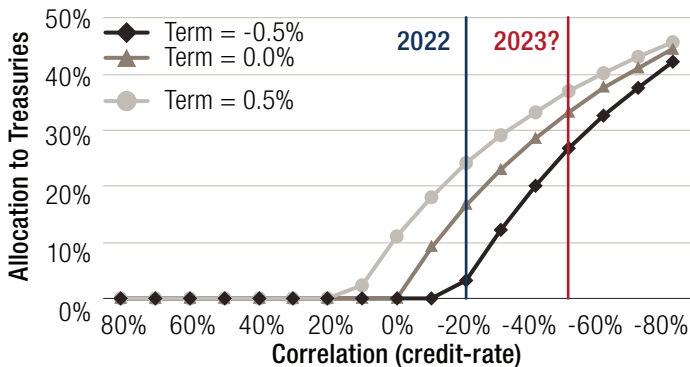
for market volatility and liquidity, and reflects the credit spread in excess of default losses. It can be measured as a proportion of the credit spread. A rule of thumb, defining the credit premium as two-thirds of spread levels often works well. For high-yield bonds, this is about 3.5% (5% spread minus 1.5% in default losses).

Using the above heuristic, we estimate the medium-term return of Treasuries over cash as being -0.5%, and for high yield as 3% (3.5% credit premium and -0.5% term premium).

**Why decorrelation should drive Treasury allocation in a high-yield strategy**

Negative term premia often incentivise investors to reduce duration and enhance credit spreads by focusing on low duration bonds with credit risk. While this tactic works in an environment of low correlations between credit and rates, it will not be the most successful strategy in an environment where inflation shocks are

**FIG 19. TREASURY ALLOCATION VERSUS CREDIT-RATE CORRELATION FOR 0.5%, 0% AND -0.5% TERM PREMIA**



Source: LOIM Calculations as at June 2023. Optimisations target maximising portfolio Sharpe ratio. For illustrative purposes only.

replaced by growth shocks and credit-rate correlations potentially become very negative. In such an environment, the diversifying impact of Treasuries can add significant value.

Figure 19 shows estimates of the optimal allocation of Treasuries in a portfolio comprised of high-yield bonds and Treasuries that seeks a maximum Sharpe ratio. This portfolio can then be combined with cash to achieve the desired risk-tolerance level.

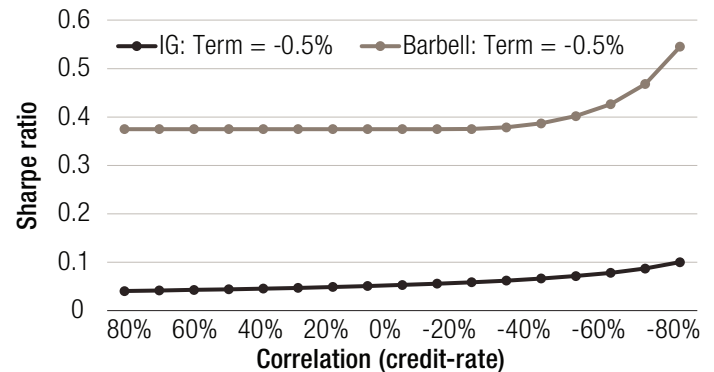
Two key conclusions can be derived from this:

1. The impact of correlations is significant, with the weight of Treasuries within the optimal Sharpe ratio portfolio rising from near zero when correlations are -20% to above 25% when correlations are at -50%. This is true even when the term premium is at -0.5%, consistent with the ACM model. From Figure 19, we see that credit-rate correlations as implied from the ETF options market have declined from a high of -20% in 2022 to -50%.
2. The impact of the term premium declines as correlations become more negative. This is illustrated in Figure 19 by the shrinking gap between the plotted lines as we move along the x axis. Essentially, the impact of diversification is key in determining the Treasury allocation within the barbell.

### Comparing a maximum Sharpe ratio portfolio with investment-grade credit

Given that investment-grade corporate bonds provide a combination of rate and credit risk, it is reasonable to ask whether they offer a better and more natural barbell than a maximum Sharpe ratio portfolio combining lower-rated credit assets with Treasuries.

**FIG 20. OPTIMAL PORTFOLIO FRONTIERS: MAXIMUM SHARPE RATIO PORTFOLIO VERSUS INVESTMENT GRADE**



Source: LOIM Calculations as at June 2023. Optimisations target maximising portfolio Sharpe ratio. For illustrative purposes only.

We can answer this question by comparing the Sharpe ratio of the optimal barbell between Treasuries and high yield with the Sharpe ratio for investment-grade bonds. The expected returns for investment-grade credit are relatively low, since the negative term premium significantly reduces the relatively small credit premium (as exemplified by the investment-grade yield curve in Figure 15). In investment-grade credit, long-term analysis suggests a credit premium of around 0.75-1%. These assumptions imply a relatively paltry 0.5% return over cash for investment-grade bonds.

Figure 20 shows that the Sharpe ratio for the barbell is significantly superior to investment grade alone. This is because the credit premium for investment-grade bonds (especially passive indexed bonds) is too low, while conversely, the risk from rates is too high. In other words, the negative term premium impacts the Sharpe ratio of investment grade much more than the credit-rate diversification. Note that the historical sample includes a period in which a large positive term premium in interest rates that also buffeted investment-grade credit was in effect. However, this is less likely to be the case as markets progress from the current environment.

### Conclusion

As we have seen, inverted yield curves are creating a negative carry environment for government and some highly rated corporate bonds. With Treasuries also exposed to negative rolldown, duration looks superficially unappealing. However, we posit that the return of the negative correlation between rates and credit re-establishes the potential of Treasuries to act as vital portfolio diversification. In an environment where inflation shocks are replaced by growth shocks, this diversifying effect can add significant value to portfolios and favours a barbell approach of high yield for carry, and duration for diversification.

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