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The corporate bond is back

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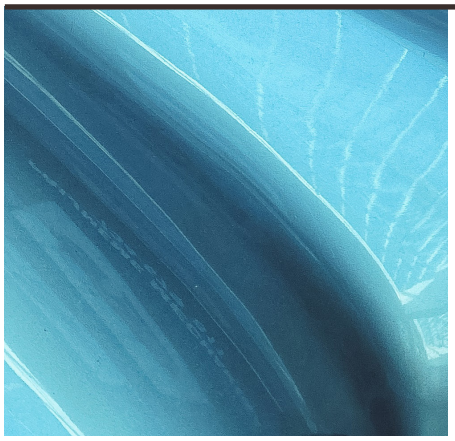
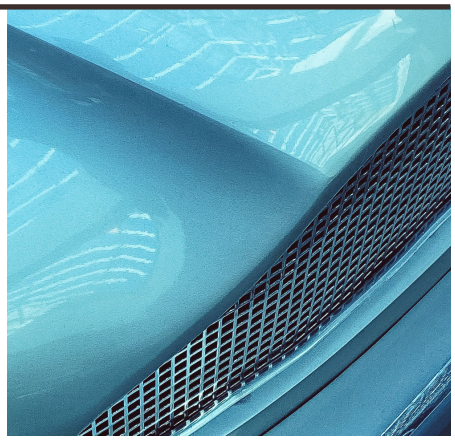
11/22

November 2022





Scenario analysis

p.23

2022 brought an end to the 'search-for-yield' that had plagued markets over the previous decade

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At a glance

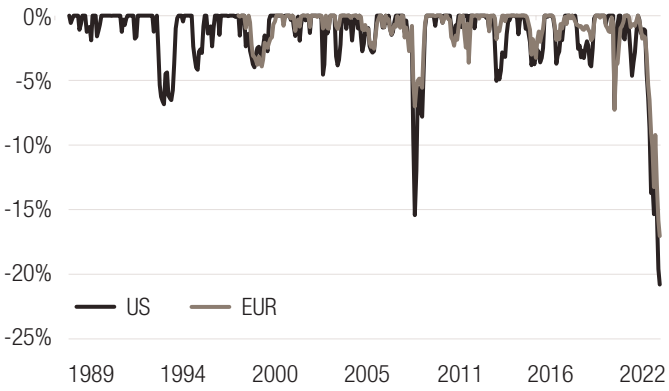
- 2022 will go down as a historic year for fixed-income assets in light of the largest drawdowns in over 40 years. Central bank reaction functions have undergone a sharp reversal as inflation has become more entrenched.
- The consequent rise in real rates has driven both interest-rates and credit spreads higher in tandem upending the key investment thesis of corporate bonds – the negative correlations of credit and interest-rate exposures. See p.04
- High quality yields are at their highest levels in 10 years proving a strong buffer to further yield increases. We believe that real-yields and consequently corporate bonds yields are at an inflection point with spread increases likely to countered by a drop in interest-rates making us more sanguine about duration risk. See p.09
- Stronger initial corporate fundamentals, better maturity distribution and the relatively robust position of banks removes the left tail for credit risk. Credit spreads in investment-grade and upper high-yield provide a significant buffer to even the worst case default losses making us optimistic about high-quality credit even though fundamentals are likely to revert to mean going forward. See p.12
- 2022 has brought with it an end to the 'search-for-yield' that has plagued the previous decade. Significant yields are now available in all currencies at relatively high qualities from a combination of interest rate and credit spread increases.
- In short – the corporate bond is back. See p.26

A landmark year for fixed-income

Largest drawdowns in history

This has been a landmark year for fixed-income, as markets have been rocked by the largest drawdown experienced in over 40 years. The drawdown in the US credit index is greater than the Global Financial Crisis (GFC), although for different reasons. From the drawdown chart plotted in Figure 1, we can see that the total return drawdown in the US has eclipsed the 2008 episode at over 20% while the drawdown in the Eurozone has been more than twice as severe as the 2008 drawdown (16% versus 7%).

FIG. 1 TOTAL RETURN DRAWDOWNS – CREDIT INDICES

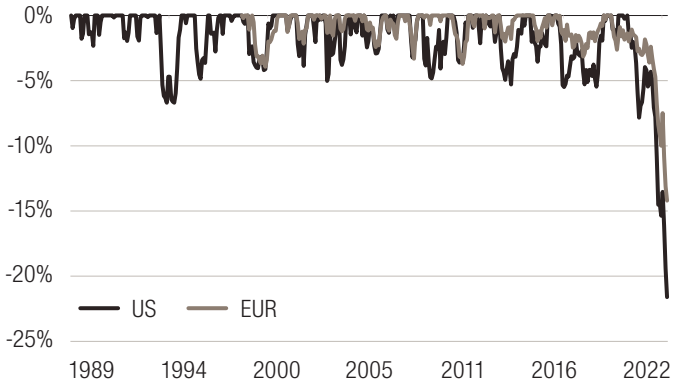


Source: Bloomberg, LOIM calculations.

While the drawdown in 2008 was a credit event, this latest episode stems from an unprecedented rise in interest rates. Historically, interest rates have provided a buffer to a credit drawdown, with countercyclical policy and rate cuts ameliorating the impact of a credit shock. However, 2022 has been the first year in recent history in which a significant rate drawdown has coincided with a credit drawdown. This breakdown of the diversification has largely been a result of a shift of central banks, in their acknowledgement of rapidly rising and unsustainable inflation, resulting in a sharp hiking cycle alongside a turning business cycle. Consequently, all risk assets have sold off in sympathy with a sell-off in risk-free treasuries.

As we have previously outlined, corporate bonds have exposure to two distinct sources of risk – interest-rate risk and credit risk. The current drawdown in fixed-income is from interest-rate risk. In fact, the drawdown from interest rates in 2022 has been well over twice as pronounced as any such episode in the past 30 years, as seen in Figure 2. The current episode has been further exacerbated by the low levels of yields at the start of the drawdown in 2021, meaning that carry has provided a limited buffer to interest rate rises in contrast with the 70s and 80s.

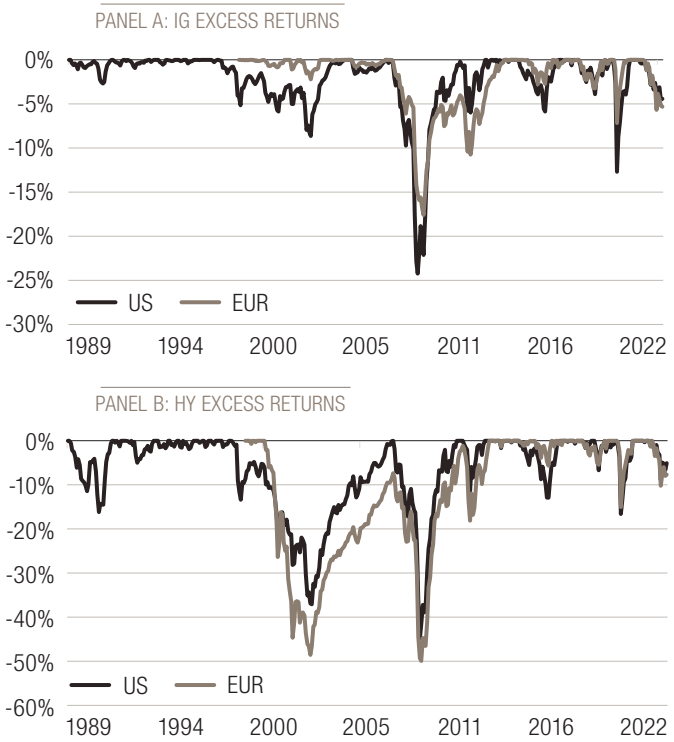
FIG. 2 RATE RETURN DRAWDOWN OF CREDIT INDICES



Source: Bloomberg, LOIM calculations.

The selloff in rates has also spilled over to risk assets such as credit and equities. The drawdown in credit in the Eurozone, has been comparable to the Covid-19 crisis and larger than that of the commodities crisis of 2016. Investment-grade (IG) credit spreads in Europe surpassed 235bps bps in October, comparable to the Covid-19 peak of 247bps. US credit spreads have been more benign, partially because of the lower impact in the US of the war in Ukraine and a greater exposure to energy within the credit universe, but have still surpassed the highs of the 2018 tightening cycle.

FIG. 3 CREDIT EXCESS RETURN DRAWDOWN OF CORPORATE BOND INDICES



Source: Bloomberg, LOIM calculations.

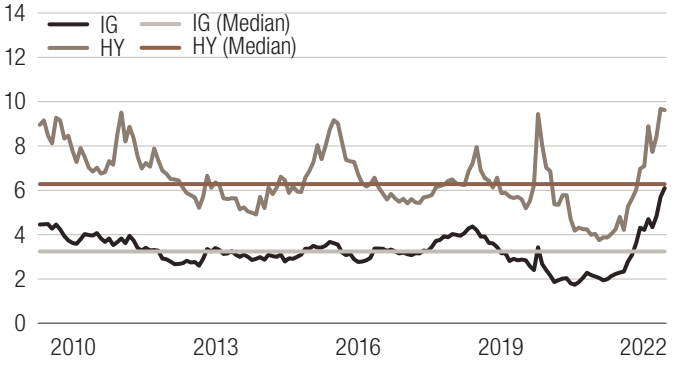
Yields most attractive in a decade

The combination of a rate and credit selloff has resulted in corporate bond valuations being the most attractive in decades. IG yields in Europe are at their highest since the Eurozone crisis peaks while US IG yields are at their highest since the Global Financial Crisis as seen in Figure 4. Investment-grade yields in the US and Europe are now higher than median high-yield yields.

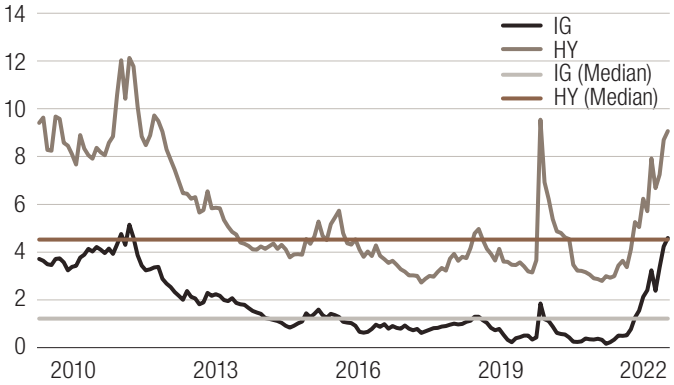
Investment-grade yields in the Eurozone stood at around 0.5% at the start of the year and have now risen to 4.5%. BBB yields in the Eurozone has moved from around 0.6% to 5.0% over the same period, pointing to an increase in yields of nearly 4.5%. Around 70% of this increase has come from a rise in risk-free yields, while 30% comes from a rise in credit spreads. Similarly, yields for US BBB's have increased by 4% - from around 2.6% to 6.4% over the same period - with around 80% of this increase coming from the rise in interest-rates, and around 20% from rises in creadit spreads.

FIG. 4 YIELD TO WORST OF CORPORATE BOND INDICES

PANEL A: USD INDICES



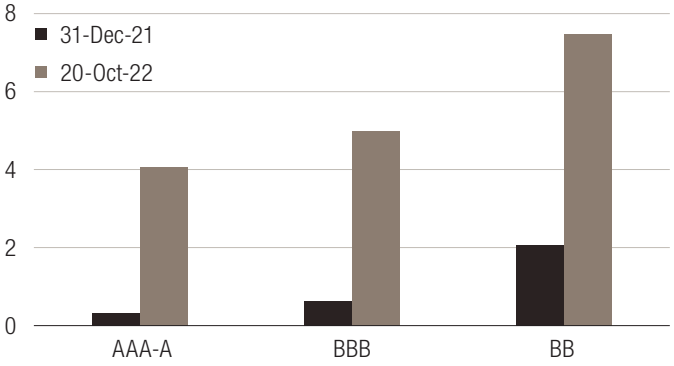
PANEL B: EUR INDICES



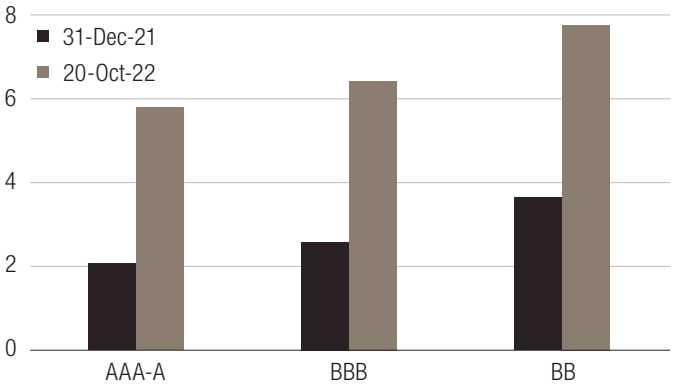
Source: Bloomberg, LOIM calculations.

FIG. 5 YIELD COMPARISON: START OF YEAR (31 DECEMBER 2021) VERSUS CURRENT (20 OCTOBER 2022)

PANEL A: EUR CORPORATES



PANEL B: USD CORPORATES



Source: Bloomberg, LOIM calculations.

Real rates are driving risk-aversion

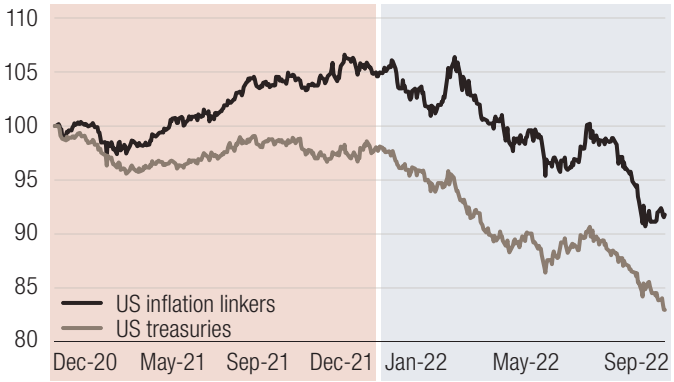
Significant credit and interest-rate selloffs happening in tandem represents a correlation breakdown not seen since the 1990s. One key investment thesis of corporate bonds - the negative correlations of rate and credit exposures - has been challenged in 2022. As shown in Figures 6 and 7, the rate selloff in 2022 has been from a rise in real-yields reflecting increasing central bank hawkishness deep into the territory of restrictive monetary policy. This is in contrast with 2021 where a rise in inflation expectations drove the selloff, leaving real rates at long term lows. However, with the sharp move experienced thus far in 2022, scope for further increases are likely to be much more limited with current levels suggesting tight conditions.

The rise in real rates, together with the uncertainty around central bank policy, has resulted in highly-elevated volatility in rates. Credit volatility has also risen substantially but is nowhere near the extremes of Covid-19 and lower than that seen in prior selloff episodes such as during the Eurozone or even the commodities crisis. The rise in rate volatility, as shown in Figure 8, is therefore driving risk aversion across assets.

In the next section, we examine the macro backdrop in order to gain a better idea of what to expect, going forwards, from central banks.

FIG. 6 REAL RATES VERSUS NOMINAL RATES: US

PANEL A: RETURNS

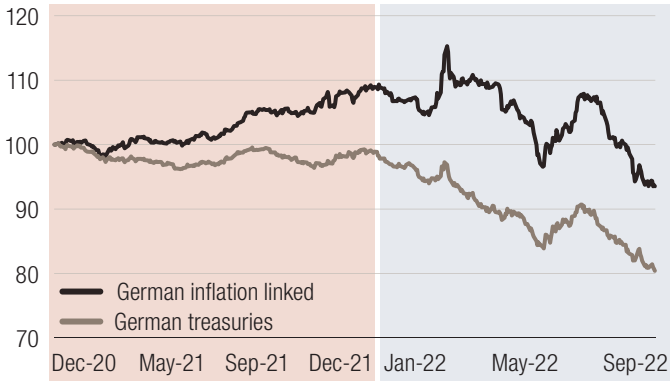


PANEL B: YIELDS

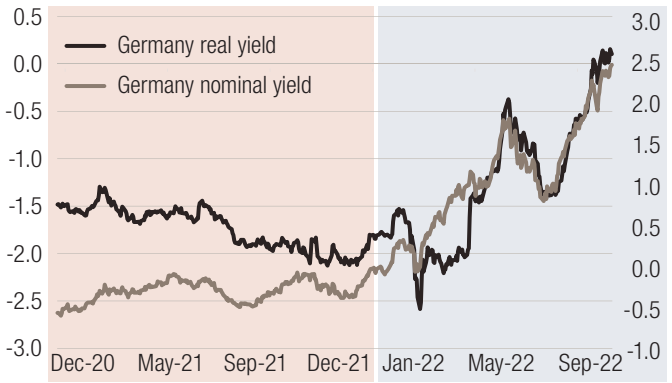
Source: Bloomberg, LOIM calculations.

FIG. 7 REAL RATES VERSUS NOMINAL RATES: (EUROPE)

PANEL A: RETURNS



PANEL B: YIELDS



Source: Bloomberg, LOIM calculations.

FIG. 8 VOLATILITY – RATE AND CREDIT

PANEL A: US RATE VOLATILITY (MOVE)

PANEL B: CREDIT VOLATILITY (ITRAXX XO INTRA-DAY)

Source: Bloomberg, LOIM calculations.

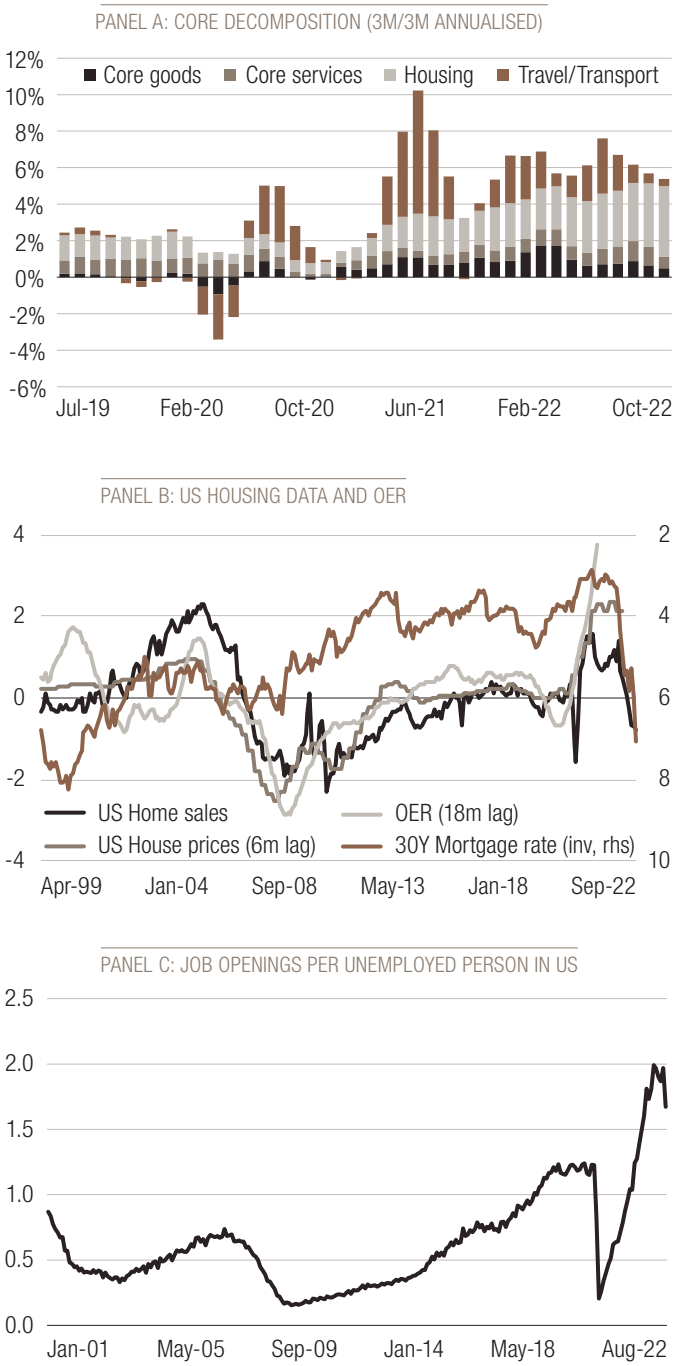
The overwhelming influence of inflation

The macro backdrop has been the driver of the price action seen in the year to date. Central bank reaction functions have undergone a sharp repricing, as inflation has become higher and more entrenched, driving yields higher and spreads wider. Given the overwhelming influence that inflation has had on all markets year to date, its composition and outlook warrants a closer look. Indeed, under the surface, we can see nuances between the inflationary conditions in the key economic zones of the US and the Eurozone.

In the US, demand for goods and services clashed with supply chain bottlenecks to drive higher readings earlier in the year. These have shown some signs of cooling as demand eases and supply disruptions have settled, particularly in goods. Similarly, heightened energy and other commodity-linked components have moderated after high readings earlier in the year. However, elements that are more endogenous to the US economy, such as housing-related components, and Owner's Equivalent Rent (OER) in particular, have remained drivers of core US inflation and are yet to show signs of moderation (Figure 9A). As a sector sensitive to interest rates, central bank intervention can have a very direct impact, and indeed indications from the US housing market (Figure 9B) suggest that the tightening financial conditions are biting, and the lagged nature of OER points towards falling prints over the next six months. Another key factor is an extremely tight labour market (Figure 9C) which threatens to drive a wage price spiral. Again, this is a component that rate hikes can directly address, so remains within the hands of the Federal Reserve's policy stance.

Eurozone inflation is much more convoluted due to the exogenous nature of the ongoing energy price crisis and its associated knock-on effects (Figure 10A). European gas and electricity prices are increasing at a much higher rate than US equivalents due to the heavy reliance on Russian supply (Figure 10B). Whilst these prices have subsided from the summer extremes, they still sit many multiples above pre-war levels. This will keep energy-induced inflation high but unpredictable through the winter. Additionally, demand-driven components are yet to show the same signs of peaking as has been the case in the US, likely driven by a later post-pandemic reopening as well as less in the way of financial conditions tightening, with the European Central Bank (ECB) less advanced in their hiking cycle. Yet, the impact of such substantial energy price rises has a similar impact on demand as monetary tightening would, which may limit the amount of ECB action required. Complicating the outlook further are fiscal measures, limiting the impact of higher energy prices, which are currently being debated and likely implemented in the near future. However, ultimately, we would expect the cost-of-living squeeze from energy prices and ongoing tightening of financial conditions to hit the endogenous demand components, with a recession very likely to hit soon, if it's not already here.

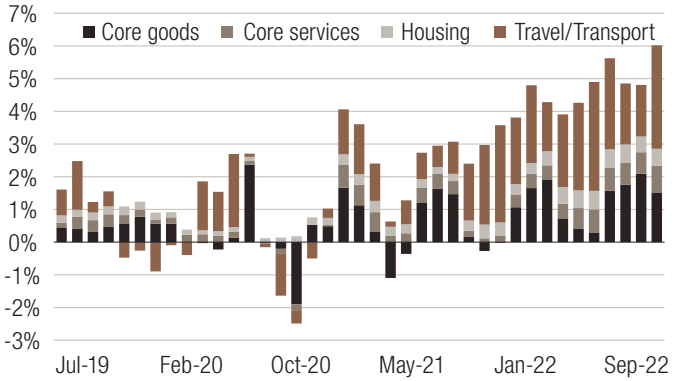
FIG. 9 US INFLATION



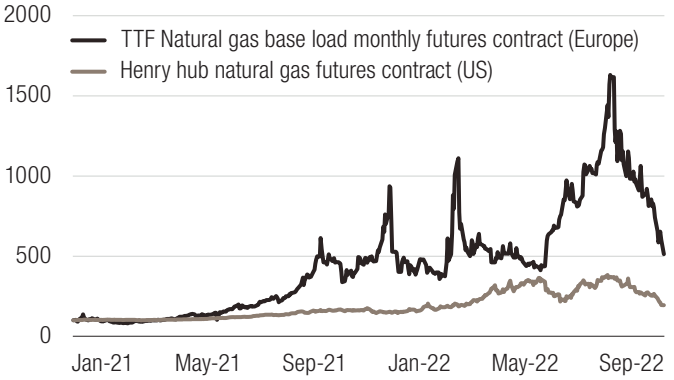
Source: Bloomberg, LOIM calculations.

FIG. 10 EUROZONE INFLATION

A: EZ CPI DECOPOSITION (3M/3M ANN)



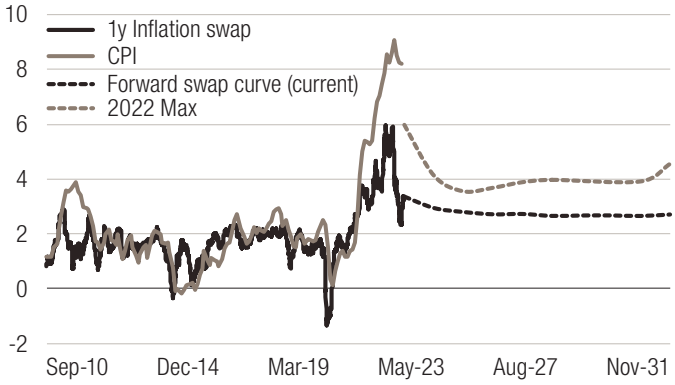
B: NATURAL GAS PRICES US VERSUS EUROPE (INDEX)



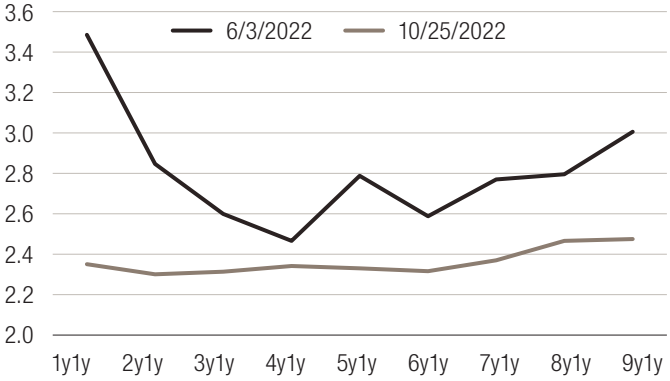
Source: Bloomberg, LOIM calculations.

FIG. 11 US INFLATION EXPECTATIONS

A: MARKET INFLATION PRICING VERSUS CPI



B: INFLATION SWAP CURVE: PRE AND POST JUNE 75BPS HIKE



Source: Bloomberg, LOIM Calculations.

Indeed, a retracement in inflation is widely priced across markets as the acceleration in central bank hiking has seen the outlook for growth marked down (Figure 11A). This is true for both short-term inflation and longer-term inflation expectations, which had begun to move concerningly higher before the Fed and ECB's acceleration to front loaded hikes around June (Figure 11B).

The key underlying rationale for this repricing is a shift in narrative away purely from inflation to the possibility of an impending recession. Historical analysis in Figure 12 shows that, ultimately, recessions rein in inflation, and quite effectively too. We can see how every instance of recession has caused a sharp fall in inflation, although the timetable for a return to target can be much longer if starting from a high point. For example, the 1974 recession helped inflation fall from a 12.3% peak, but took 2 years to return to the 2% target. And indeed, more forward-looking data points are pointing towards recessionary conditions, with the new orders component of PMIs falling into contractionary territory. Consumer and business sentiment indicators are also printing particularly poor readings, suggesting that the direction for new business is likely to continue on a downward trajectory as consumer balance sheets continue to feel the squeeze.

Central banks have made it clear that they are laser-focused on bringing inflation to target, as was reinforced by Fed chair Jerome Powell at the August Jackson Hole symposium and each Fed meeting thereafter. The institutions appear comfortable with the economic pain that the inflation fight will cause in returning to the 2% target. However, we would contend that this stance will continue to be challenged as inflation falls and economic conditions worsen. An increasing unemployment rate that accompanies a recession would put pressure on the tight policy stance of central banks, particularly if financial stability is being called into question. In this case, we would expect to see hiking cycles pause or at the least slow down substantially. Consequently, as the risk of tipping into recession draws nearer, we see both limited further downside from a rates perspective, and further upside surprises in rates expectations.

FIG. 12 INFLATION DYNAMICS IN RECESSIONARY

RECESSION PERIOD	NUMBER OF MONTHS FOR INFLATION TO HIT 2% FROM PEAK	PEAK CPI PRE-RECESSION	CPI TROUGH POST RECESSION	PEAK TO TROUGH IN CPI	GDP DECLINE
1937	9	5.1	-4.1	-9.2	-18.2
1948	11	10.2	-2.9	-13.1	-1.7
1957	16	3.7	0.3	-3.4	-3.7
1969	30	6.2	2.7	-3.5	-0.6
1974	24	12.3	4.9	-7.4	-3.2
1981	41	14.8	2.5	-12.3	-2.2
1990	16	6.3	2.6	-3.7	-1.4
2001	13	3.7	1.1	-2.6	-0.3
2008	5	5.6	-2.1	-7.7	-5.1

Source: The Macro Compass, Global Financial Data, Bloomberg, LOIM Calculations.
Note: We only include recessionary periods where pre-recession inflation was above target (2%).

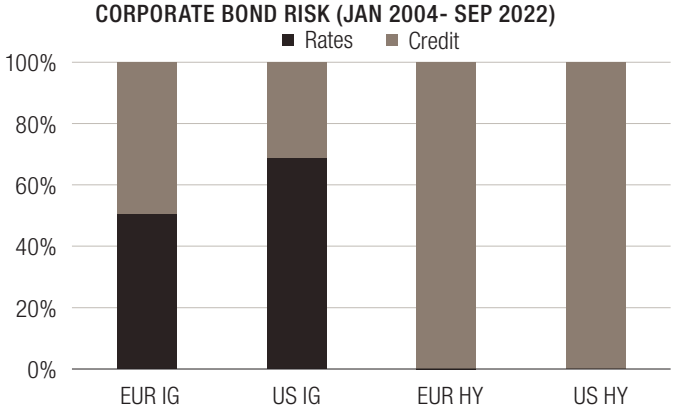
Two distinct sources of risk and returns

Our view is that corporate bonds are not a monolithic instrument, but are instead a combination of two distinct sources of risk and returns – duration and credit risk. Duration risk reflects the interest-rate or discount factor risk and is embedded in all corporate bonds. Credit risk on the other hand is the risk embedded within credit spreads and reflects compensation for market expectations for long-term risks such as defaults, downgrades and liquidity. A comprehensive view on corporate bond performance necessitates views on both sources of risk, but the contribution from each to total volatility can vary through time and depending on where the bond lies on the credit spectrum.

On average historically, duration is a higher contributor to Investment grade volatility than it is for high yield, which is driven much more by credit risk. In fact, Figure 13 shows that, taking a long horizon view, high yield volatility is driven entirely by credit as extreme periods of stress dominate any rate volatility from other periods. This is intuitive, as high yield is by definition of lower quality, hence compensation is driven much more by the credit risk that one takes on when owning the instrument. However, it is also important to note that these contributions are not constant through time with credit risk becoming dominant in periods of extreme stress such as the GFC or the peak of the Covid-19 crisis. The split of credit and interest-rate risk in IG indicate that around two-third of the risk of IG corporates is driven by duration components.

In the next sections, we explore the case for both of these fixed income risk factors, focusing first on duration.

FIG. 13 CONTRIBUTION OF CREDIT AND INTEREST-RATES TO CORPORATE BOND RISK (JAN 2004- SEP 2022)



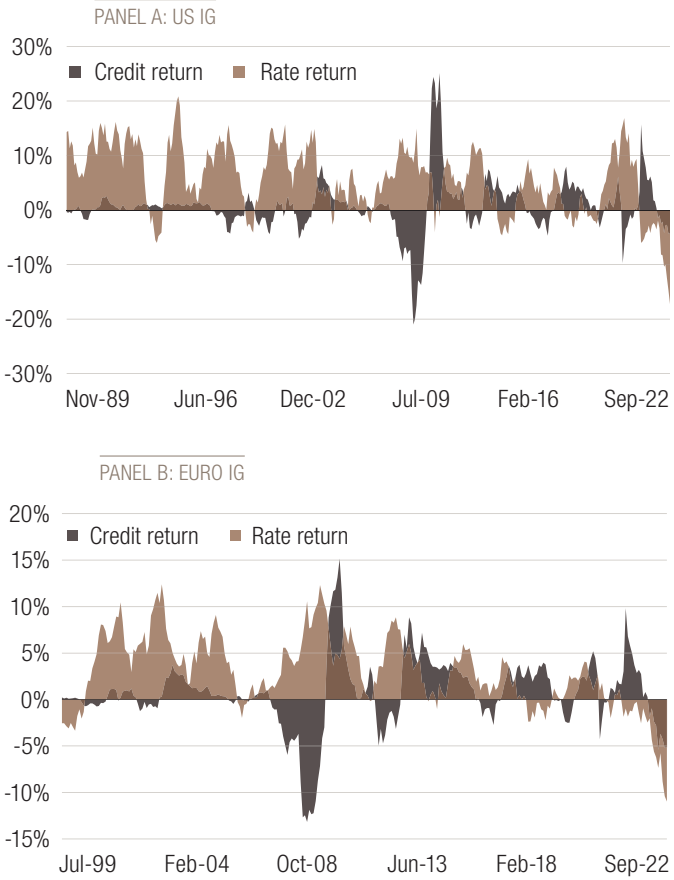
Source: Bloomberg, LOIM calculations.

The case for duration

An unprecedented structural break

The breakdown in diversification between rates and credit is measured in a number of ways. Risk models often use short-term diversification measures such as monthly return correlations. Another approach uses longer-term return measures that better account for asynchronicity. For example, during the 2008 GFC, the credit selloff deepened in September and October of 2008, post-Lehman bankruptcy, while the interest-rate rally was in November and December 2008 when the Fed cut rates by nearly 2% in response to the looming credit crunch. Figure 14 plots 12-month rolling credit and rate returns for US and EUR corporate bonds and shows that historical episodes of rate drawdowns have been associated with flat credit returns and conversely credit drawdowns have been associated with positive rate returns. Periods of positive rate-credit correlations have largely been on the upside with a credit rally coinciding with a rate rally. **The events of 2022 therefore represent an unprecedented structural break, with large negative returns from both sources.**

FIG. 14 CREDIT AND RATE RETURNS (12-MONTH ROLLING): IG INDICES

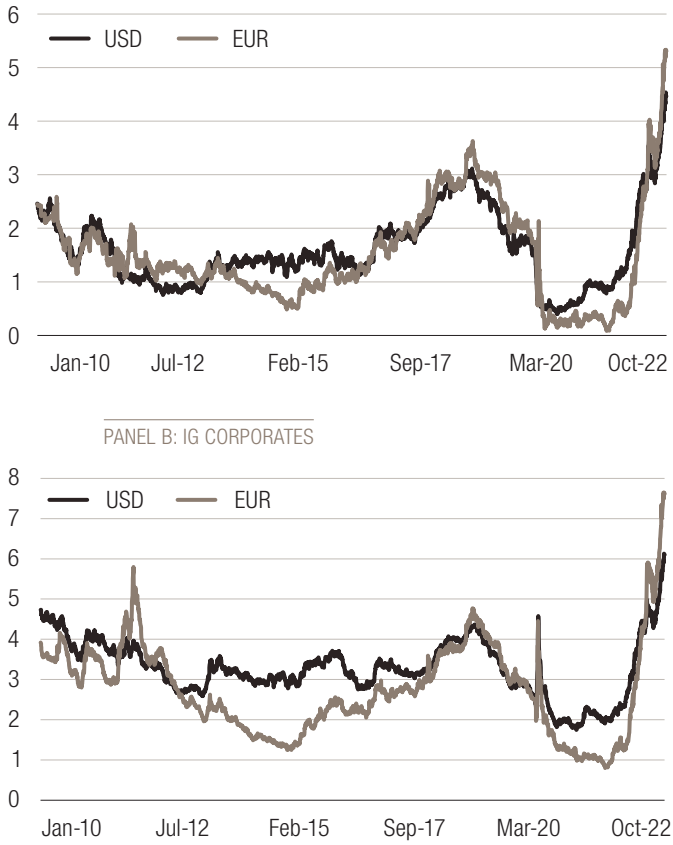


Source: Bloomberg, LOIM calculations.

Historically-attractive valuations

High-quality yields are at their highest levels in over 10-years, from both a combination of rises in risk-free rates and increases in credit spreads. As Figure 14 shows, the defining feature of the 2022 selloff has however been the lack of diversification. Duration, which has historically been a "risk-off" hedge over the past 20 years, has been positively correlated with risk assets with credit spreads rising and equity prices dropping in sympathy with the pricing in of increasingly tighter monetary policy. However, the unprecedented drawdown has also taken fixed-income yields from all-time lows (early 2021) to historically attractive levels as we observe in Figure 15.

FIG. 15 YIELDS OF US AND GERMAN TREASURIES AND IG CORPORATES (USD HEDGED)

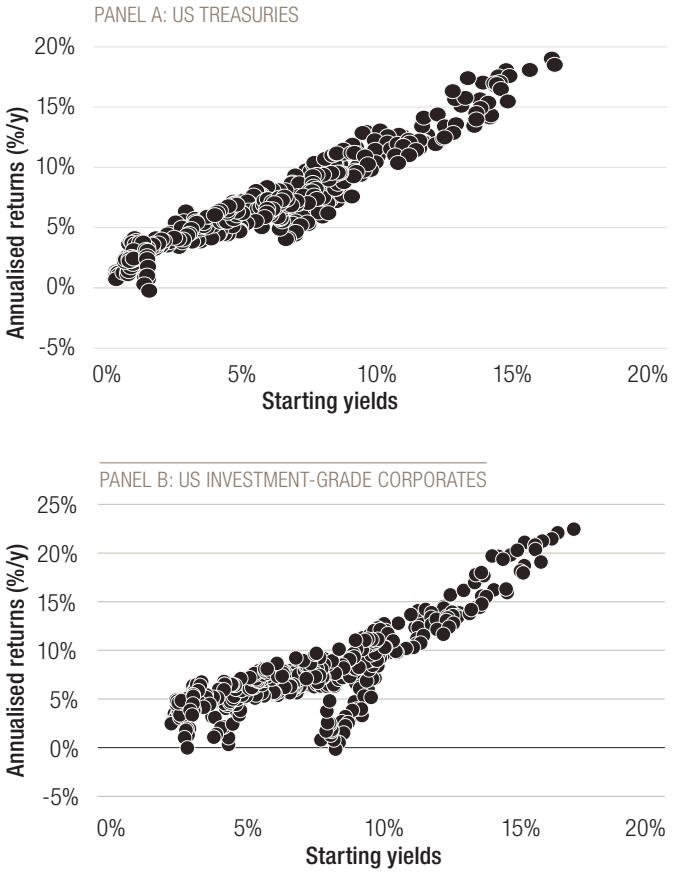


Source: Bloomberg, LOIM calculations.

Current yields are driving long-term returns

An important point to remember about fixed-income is the mean-reverting nature of the asset class. This is especially relevant for higher rated assets such as treasuries and investment-grade corporates (IG). Figure 16 calculates the 5-year return against the starting level of yields over the past 50 years for US assets. The current level of yields is the strongest driver of long-term returns, especially for treasuries. The key intuition is that over longer periods, the negative impact of a rise in yields is compensated by an increase in carry. Figure 16 indicates that we can expect 5-6% annualised return from treasuries in the US over a business cycle (3-5 years). A gradual increase in yields from here on would therefore not be negative for long-term returns.

FIG. 16 US YIELDS VERSUS 5-YEAR ANNUALISED RETURNS



Source: Bloomberg, LOIM calculations. Data covers period Jun 1973-Sep 2022.

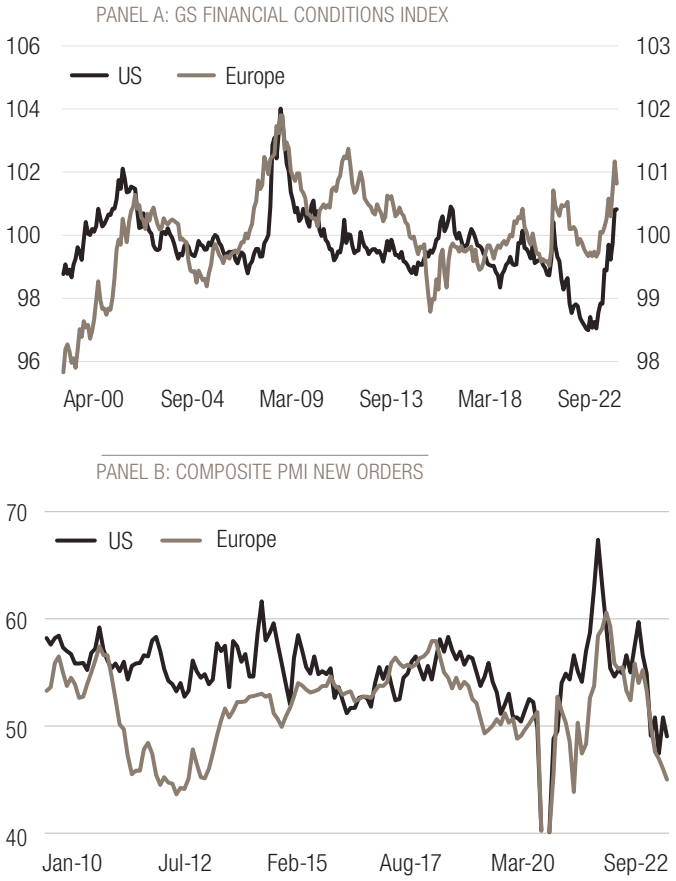
The return of diversification in 2023?

While the valuations argument provides a buffer to investing in risk-free assets, the diversification argument provides a reason to combine it with other sources of long-term income, such as credit-risk. The last 20 years have been characterised by the diversifying properties of duration. This is largely a result of the countercyclical policies of central banks in which rate cuts have been the first line of defence against economic shocks that have largely been negative growth shocks. The rise of inflation to levels not seen since the 1970s, however, has prompted central banks to embark on a pro-cyclical policy of raising interest rates in a bid to cool down the economy and halt runaway inflation expectations, a phenomenon which plagued and fed the 1970s inflationary period. This has resulted in a breakdown of the diversifying properties of duration risk. A key measure of central bank hawkishness and monetary tightening is the rise in real yields. Real yield is measured as the difference between nominal yield and break-even inflation as priced in the inflation swaps market. The level and changes in real yields is often used as a measure of central bank hawkishness. Figure 17 indicates that real yields have spiked in 2022, especially in the Eurozone, with the pricing in of increased central bank hawkishness bringing real yields to positive territory in both markets. In the Eurozone, for example, we have seen the largest YoY rise in real yields relative to history by a factor of more than three.

FIG. 17 REAL YIELDS – LEVELS AND CHANGES

More recently, real-rates have oscillated around high levels largely from expectations of reduced hawkishness as interest rate hikes, combined with high inflation, start filtering into the real economy. Financial tightening has increased substantially, as seen in Panel A of Figure 18 while Panel B shows the impact on some of the forward-looking measures of growth as indicated by PMIs.

FIG. 18 FINANCIAL TIGHTENING AND WEAKENING ECONOMY



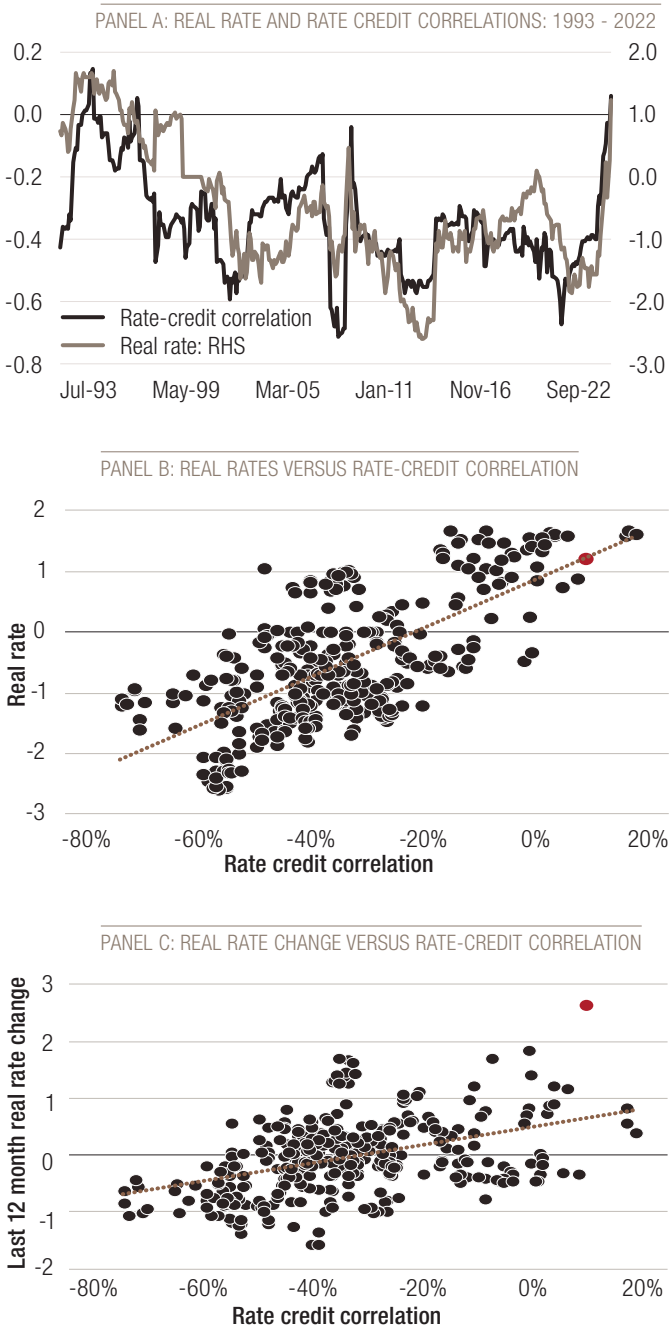
Source: Goldman Sachs, Markit, Bloomberg.

Given that we expect real rates to either stabilise or decline in the future as further prospects for rate rises diminish with the hiking cycle thus far taking hold of the real economy, the impact on credit-rate correlation is expected to be significant. Figure 19 shows that there is a strong link between credit-rate correlations and real-rates. Real rate levels and changes are both responsible for changing credit-rate correlations.

Rates a diversifier again

In conclusion, as we move to a cooling of the economy that naturally brings down inflation, we expect central banks to slowly resume their counter-cyclical stance. The counter-cyclical stance, measured by a stabilisation or reduction in real-rates, will result in a resumption in the diversification properties of duration risk. This in combination with the high levels of risk-free yields currently achievable makes duration exposure a desirable one to have in fixed-income portfolios.

FIG. 19 REAL RATE VERSUS RATE-CREDIT CORRELATIONS



Source: Bloomberg, LOIM Calculations. Correlations are exponentially weighted with 12 month half life using data from June1973-Sep 2022.

The case for credit

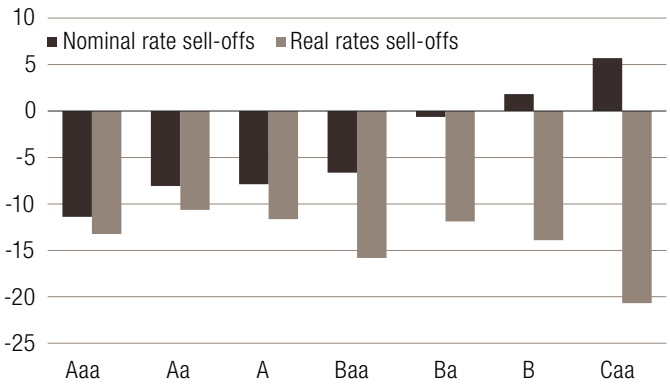
The second source of risk and return is credit, which refers to the risk embedded within credit spreads. This reflects the long-term risks such as defaults, downgrades and liquidity, in conjunction with shorter-term market-risk of spreads moving up or down. Credit spreads have historically provided diversification to rates, with credit risk being benign in periods of rate rises. This is because periods of central bank tightening have come at times of economic and corporate strength, which support credit markets. While this was the case in 2021 when interest-rates rose while credit spreads compressed, 2022 has seen a breakdown of this relationship as we analyse further in the next section.

Real rates rise – negative for credit

In 2021, we outlined the case for credit serving as a diversifier to rates. However, our results were conditional on real rates being low and negative. While the interest rate selloff started last year was driven initially by break-even rate increases that were conducive to credit, this has been followed by real-rate rises that are detrimental to credit performance.

We show the negative effect of real rate increases on assets by calculating the total return by rating category in periods of nominal rate rise and real rate rises. For example, nominal rates were rising from the end of 2020 with the unprecedented actions of central banks and subsequently the vaccine efficacy announcement in Nov 2020. Real-rates however only began rising in 2022 with the hawkish Fed pivot at the end of 2021. In Figure 20, it is clear that a nominal rate selloff is better for credit exposures as a rate selloff is offset by a credit rally. On the other hand, real-rate selloffs are far more detrimental with all assets performing poorly as we have seen in 2022.

FIG. 20 PERFORMANCE OF CORPORATE BONDS IN REAL AND NOMINAL RATE SELLOFFS: JAN 1997 – SEP 2022



Source: Bloomberg, LOIM calculations.

While a rise in real rates is a macro variable that affects arguably all risk assets, including credit, fundamentals are another factor that drive the long-term performance of credit. In the next section, we run a deeper dive into credit fundamentals.

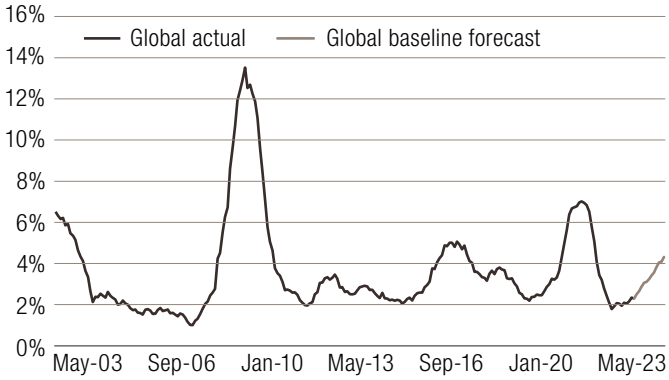
Better initial fundamentals

Macroeconomic fundamentals are likely to get worse, but from a credit perspective the initial starting point is better than in previous crises. Better initial fundamentals coupled with the absence of a smoking gun such as the leveraged banking sector in 2008 makes the extreme left tail less likely in our view.

The default cycle has likely turned

Hawkish central banks and a rise in the cost of capital is expected to impact default expectations. The extremely benign conditions of 2020-21, with very low rates and high liquidity that resulted in historically low default rates, is unlikely to persist. As a result, we expect a reversion to mean although this may be faster than usual reflecting the urgency of central banks to normalise financing conditions in the face of unprecedented inflation. We see from Moody's expectations in Figure 21 that defaults are expected to revert to long-term averages. Macro-economic leading indicators of defaults such as loan-officer surveys of lending standards and financial conditions are also turning rapidly. This indicates that the default cycle has likely turned and this can be expected to become increasingly evident in 6-9 months.

FIG. 21 MOODY'S GLOBAL DEFAULT RATE – ACTUAL AND FORECAST



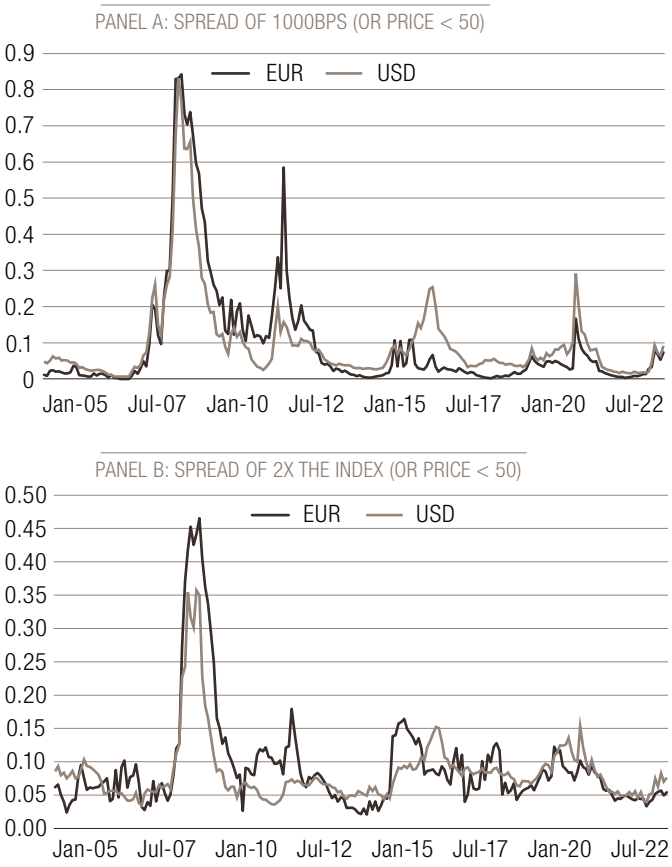
Source: Moodys September 2022 Default Report, LOIM calculations.

Measuring idiosyncratic risks

Market risks have increased, but idiosyncratic risk remains more contained than previous episodes. Idiosyncratic risks tend to be a precursor to default activity as the most distressed, or idiosyncratic names, tend to fall first in the face of adverse market and funding conditions. We measure idiosyncratic risks in two ways. First, we measure the distress rate within the USD and EUR high-yield universes. The literature on distress measures this as a spread level in excess of 1000bps or a price below 50. This measure is shown in figure 22A.

The issue with the measurement displayed in Figure 22A is that distress rates tend to follow market spread levels. Indeed in periods of very high market spreads, a much larger proportion of bonds trade above 1000bps. In the 2008 GFC, we saw almost the entire high-yield universe trading above 1000bps with a similar spike in EUR bonds in the Eurozone crisis of 2011. As a result, this measure of idiosyncratic risk also reflects a spill-over of systematic risk. Therefore, we use an alternative measure, also used in the literature, which better captures idiosyncratic risk. We calculate distress rate as the percentage of bonds with a spread greater than two times that of the index, presented in Figure 22B. Clearly, the GFC had the most distress, with almost 45% of the universe trading at above 2 times index average spreads. The Covid crisis however was more benign and comparable to the commodities crisis of 2015-16. Using this measure, the events of 2022 appear to be much more systemic in nature, with the idiosyncratic distress rates much lower than in previous spread widening episodes. This is partly a reflection of the better initial conditions of 2022. Corporations are in a stronger position from a credit perspective than in 2018 and while a reversion to mean from the extremely benign conditions of 2021 is inevitable, the risk of large waves of distress and default might be lower than during banking crisis.

FIG. 22 DISTRESS RATE IN THE US HY AND EUR HY UNIVERSE



Source: Bloomberg, LOIM calculations.

Credit ratios at historically robust levels

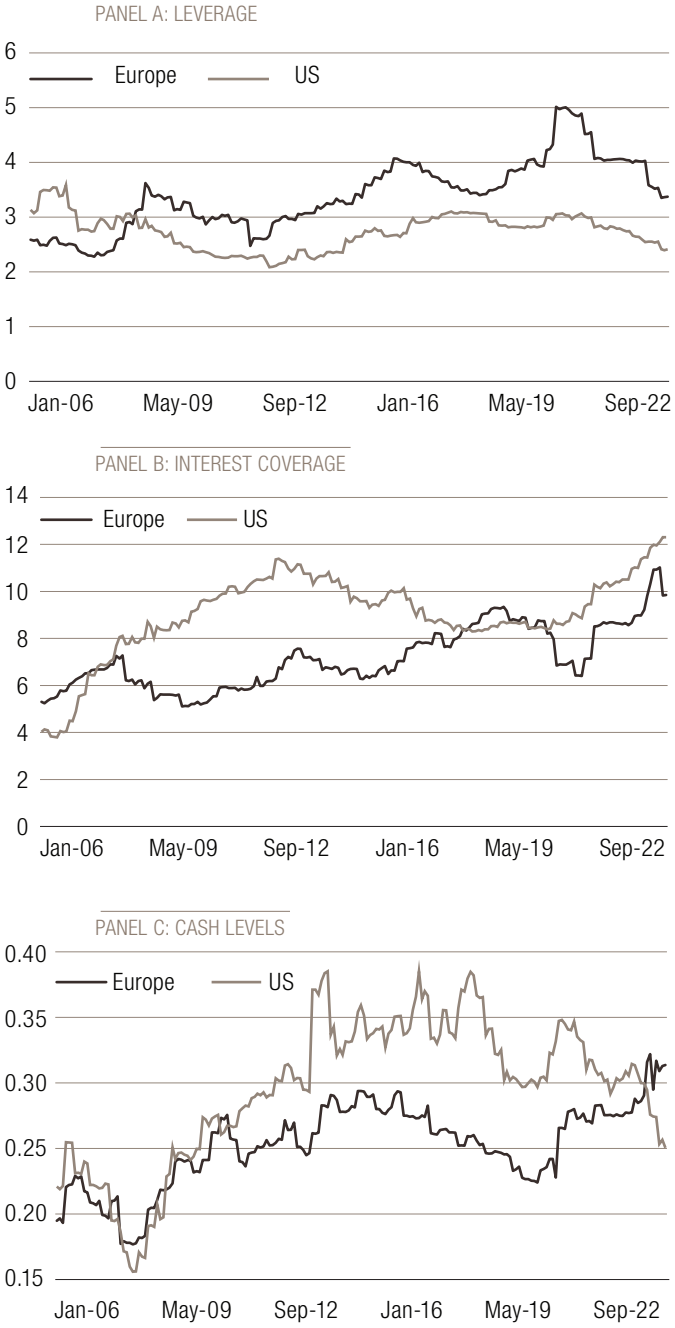
Credit fundamentals, both in the US and Eurozone, continue to be robust as we see in Figure 23. Leverage is at its local lows while interest-coverage, a measure of the ability to pay interest on debt, remain at their highs. While these metrics are likely to worsen, the rapid deterioration that was feared has not materialised with a slow decline in fundamentals towards long-term averages expected. Cash levels have come off in the US, largely driven by large, highly rated corporates running down excess cash balances build up during Covid, however remain elevated, particularly in Europe and outside of the top rated US names.

Banking sector is substantially stronger limiting a deleveraging cycle

One of the important outcomes of the GFC was the raft of regulations that were applied to the banking sector, such as the Dodd-Frank act and Volcker rule in the US and the Basel accords internationally. As a result, banks are better capitalised and able to withstand an economic downturn. This makes a balance sheet recession, such as the GFC and the associated Eurozone crisis, less likely. We show in sections later on that a banking crisis is much more detrimental for credit than an inflationary shock especially when we compare it to equities.

Panel A of Figure 24 shows that risk-based capital ratios of US banks have increased substantially thanks to the raft of regulations introduced following the GFC. The increase in capital ratios is even greater for the largest banks reflecting additional capital requirements for Globally systemically important banks (G-SIB's). This has reduced the interconnectivity and contagion risk that was a large source of the extreme credit crunch seen in 2008.

FIG. 23 CREDIT FUNDAMENTALS



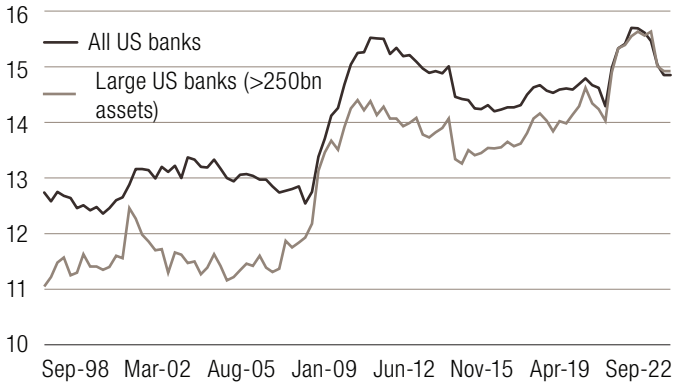
Source: Bloomberg, LOIM calculations.

[1] Non-performing loans to tier-1 capital is a ratio measuring the ability of banks to absorb credit losses.

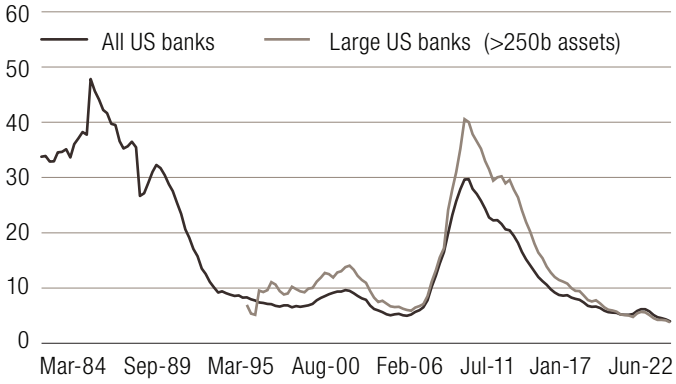
Panel B of Figure 24 presents an even greater contrast between the pre-GFC and post-GFC period in the banking sector. Here, we see that the ratio of non-performing loans to tier-1 capital,[1] has declined massively post -GFC. Banks not only have substantially larger capital buffers but also are involved in lower-risk businesses. A number of risky and capital-intensive businesses such as private debt and high-yield loans have moved to the shadow-banking sector. After peaking in the 80s with the savings and loans crisis, this ratio had risen substantially again in the GFC reaching almost 30% for all banks (40% for the largest banks). Thereafter, even during the pandemic, the ratio has remained extremely low. The Covid-19 crisis was a significant event from a default perspective with a spike in defaults in US high-yield issuers. However most of the losses were borne by the shadow banking sector (money market funds/ bond funds) with a minor increase in non-performing loans thanks to the various government measures implemented. This puts the banking sector in a position of strength thereby removing a large part of the crash risk from high-rated credit.

FIG. 24 BANKING RATIOS – US BANKS

PANEL A: TOTAL RISK-BASED CAPITAL RATIOS



PANEL B: NON-PERFORMING LOANS TO TIER 1 CAPITAL AND RESERVES

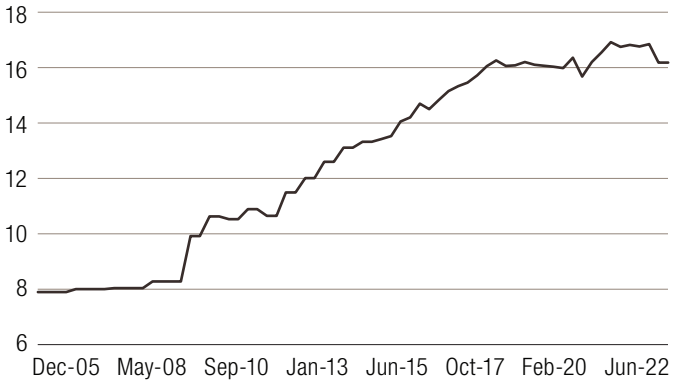


Source: FDIC, Bloomberg, LOIM calculations.

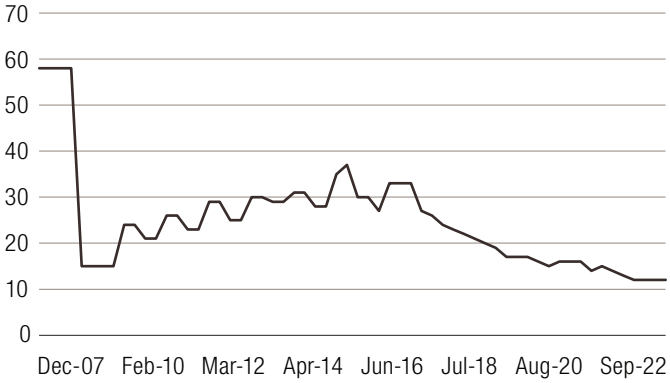
While European banks remain weaker than their US counterparts,[2] similar patterns can be seen in Figure 25 with capital ratios significantly increasing and ratio of NPL to capital[3] being significantly lower than in the past, providing a strong cushion to a defaults.

FIG. 25 BANKING RATIOS – EUROZONE BANKS

PANEL A: TIER 1 RATIO - EUROZONE BANKS



PANEL B: NON PERFORMING LOANS PER OWN FUNDS



Source: Bloomberg, LOIM calculations.

[2] Lower profitability and therefore NPL to profit or equity ratios are lower.

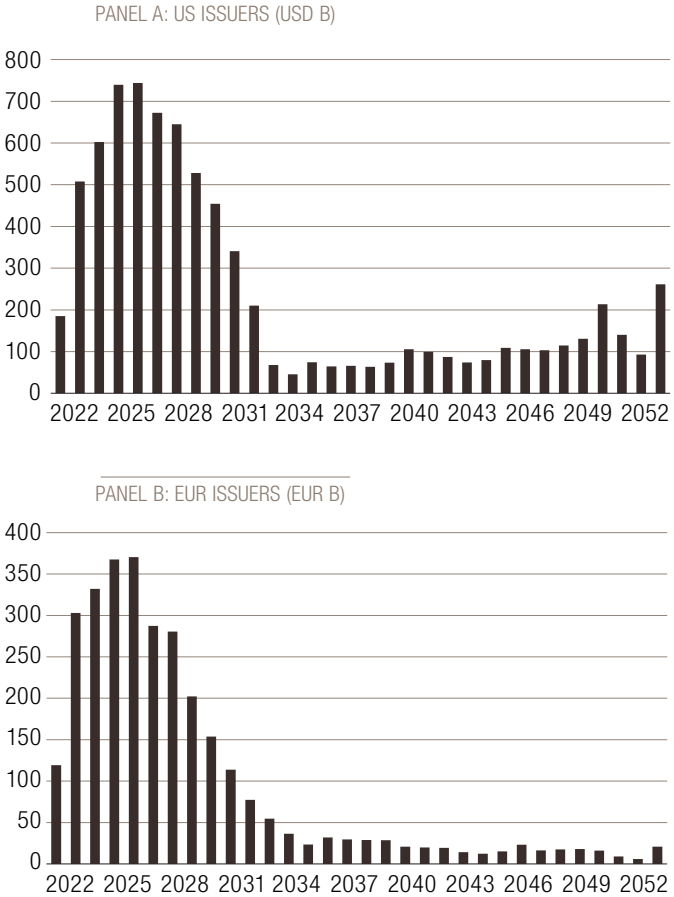
[3] Capital here is measured by "own funds" which is the sum of tier 1 and tier 2 capital.

Debt maturities well managed providing short-term buffer

One of the outcomes of the Covid-19 crisis was the cleanup of the corporate sector. Corporations, largely in the US, that did not have a sustainable debt structure or business model defaulted after the pandemic hit - facilitated by the efficiency of Chapter 11 proceedings. This occurred primarily in the energy and retail sectors. Conversely, the rest of the corporate universe extended out their debt maturities substantially in 2021.

The positive debt distribution of US and Euopean companies is seen in Figure 26, with financing needs being relatively benign in 2022 and 2023, especially in the US. This provides companies with a buffer before they re-enter the markets to refinance existing debt. Companies are using their existing cash balances and internal cash generation without requiring to accessing debt in relatively volatile periods. However, we also believe that companies especially in the Eurozone will have to tap the markets in the coming months and therefore a robust new issue market with potentially large new-issue premiums could be a positive sentiment for the credit markets.

FIG. 26 DEBT MATURITY DISTRIBUTION OF CORPORATES

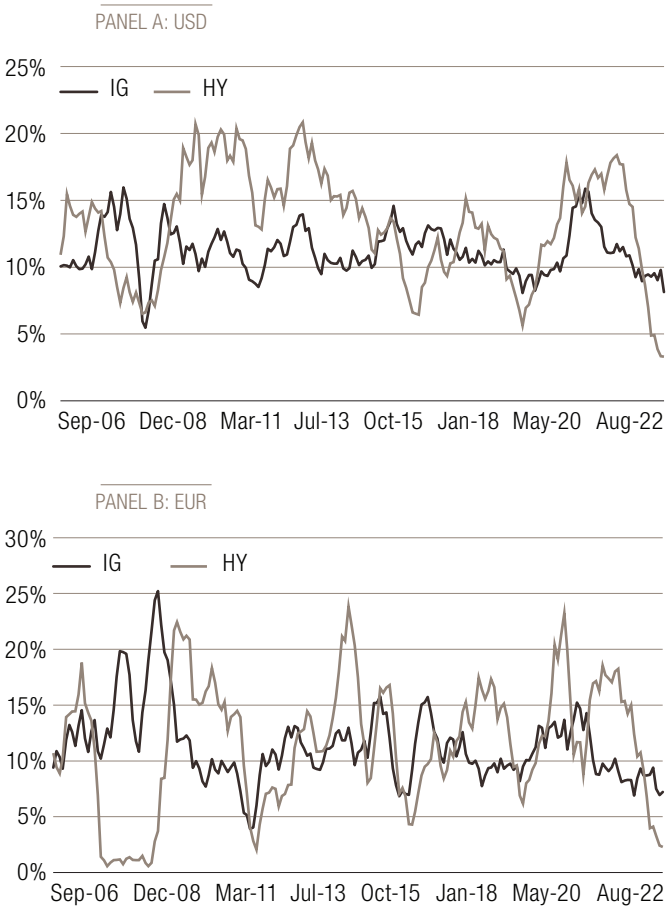


Source: Bloomberg, LOIM calculations. As of September 2022.

Low issuance a headwind especially for high-yield

The new issue market has substantially cooled in 2022 after the record issuance in 2020 and 2021. The increase in yields, and associated volatility, from a combination of rising risk-free rates and higher credit spreads has prompted issuers to delay their refinancing. Large cash balances built up during the pandemic has helped reduce refinancing pressure although the current state of extremely low issuance is unlikely to persist for too long. In general, the high-yield universe of issuers need to issue around 20% of its outstanding debt each year with IG at around 15% just to refinance maturing debt. This reflects the average maturity for the two universes with IG issuers able to issue substantially longer maturity debt. Figure 27 shows that the 12-month issuance rate (as a % of outstanding) is close to its historic lows. IG issuance rate, while at all-time lows of around 15%, is still sufficient to meet refinancing needs. The issuance rate in high-yield however has collapsed to all-time lows and is now at 10% in USD and EUR. This indicates that high-yield issuers now have to use a combination of internal cash flows and bank financing, with bond issuance clearly lagging substantially. As a result, the cash buffers built during the pandemic through excess debt issuance are reducing rapidly requiring high-yield issuers to tap capital markets soon. If the high-volatility and adverse valuation scenario persist, then some of the more challenged issuers within the high-yield space may find it difficult to refinance. This forms one basis of our preference for IG and crossover (BBB and BB) over lower-rated high-yield issuers (B and below).

FIG. 27 ISSUANCE (% OF OUTSTANDING): 12-MONTH ROLLING



Source: Bloomberg, LOIM calculations. As of September 2022.

Valuations and the business cycle

In most crises, the credit and equity markets bottom out around 6-9 months in advance of the bottoming out of fundamentals. Markets, being forward looking, tend to price-in adverse scenarios in advance. Therefore, in this section, we analyse whether macro-economic headwinds and an inevitable worsening of credit fundamentals is priced in.

Banking crisis versus inflation shocks

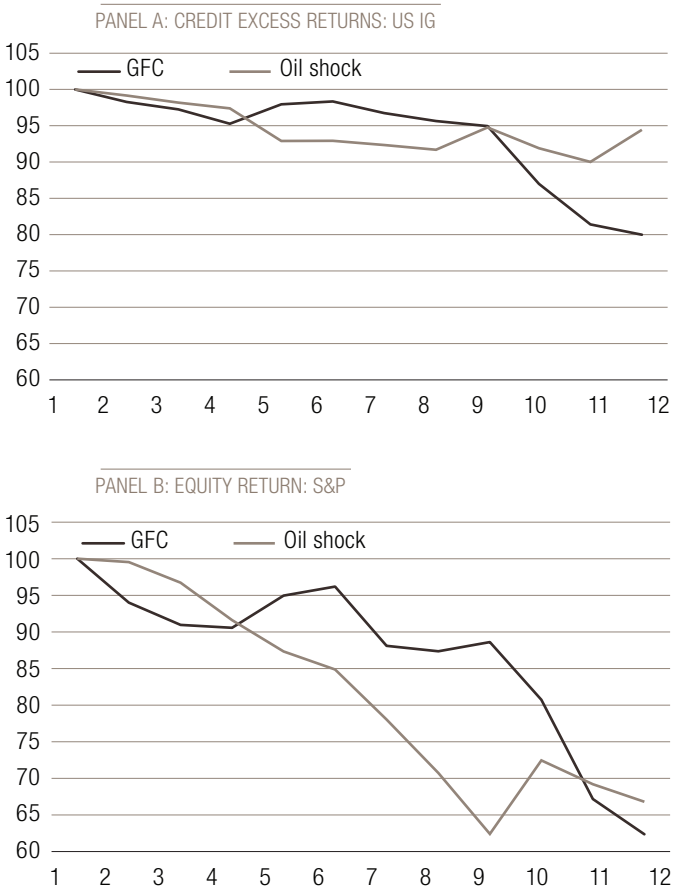
The first question is to get a handle on is: "where can spreads go?" Some approaches to this question use survey-based economic data (PMIs) and their link with valuations to infer credit spreads. Other approaches are event-based and uses historical recessions with an adjustment for the extent of the growth shock to extract worst-case credit spreads.

A caveat for all these approaches is that it depends on the type of recession. For example, the 2008 GFC was an unprecedented shock in credit markets with peak investment-grade spreads reaching 6% in USD and 4.5% in the EUR. While the GDP shock was also large at 4.5% peak-to-trough, the impact on credit spreads were especially extreme and, in our view, not comparable to shocks that do not involve a deep banking crisis. There are a few reasons why the GFC was anomalous in terms of spread levels. First, peak credit spreads were reflecting a complete breakdown in the banking sector and potentially an economic shock to rival the great depression in which the peak-to-trough GDP shock was almost 20%. Despite the relatively benign eventual outcome, defaults were still at their highest levels over the past 40 years, peaking at 12% speculative-grade default rate in 2009. In contrast, the Covid crisis that witnessed a much larger peak-to-trough GDP shock at over 10% had a speculative-grade default rate in 2020 of just over 6%. Secondly, the banking sector dominates credit indices and therefore credit spreads were reflecting the complete capitulation of all banks. This is not the case for a non-banking recession.

In the following study, we contrast banking crises, such as the GFC, with commodities/inflationary shocks, such as the 1973 and 1979 crises in the US. The real GDP shocks in the two episodes are relatively large at ~3% peak-to-trough for the US. In addition, we also contrast "risk-on" assets such as credit and equities in a banking crises such as the 2008 GFC and, to a lesser extent, the saving & loans crisis of the 80s and crises driven by commodity shocks. We find that credit tends to suffer more in a banking shock than an inflationary crisis. Conversely, equities suffer more in an inflationary shock.

Figure 28 contrasts the performance of credit (US IG) and equity (US equities) in the 2008 GFC with the oil shock of 1973 on the back of the Arab embargo. Investment-grade excess returns drawdowns in the US peaked at around 10%, similar to the excess return drawdowns in Euro IG in the current crisis. In addition, the drawdown reversed rapidly to end at around -5% by the end of the year. This contrasts with the drawdown observed in the GFC[4] which was more than twice as severe as the oil shock at 25%. Equities, on the other hand, had a similar drawdown at approx. 40% in both episodes.

FIG. 28 CREDIT VERSUS EQUITY DRAWDOWNS – GFC (2008) VERSUS 1973 OIL SHOCK

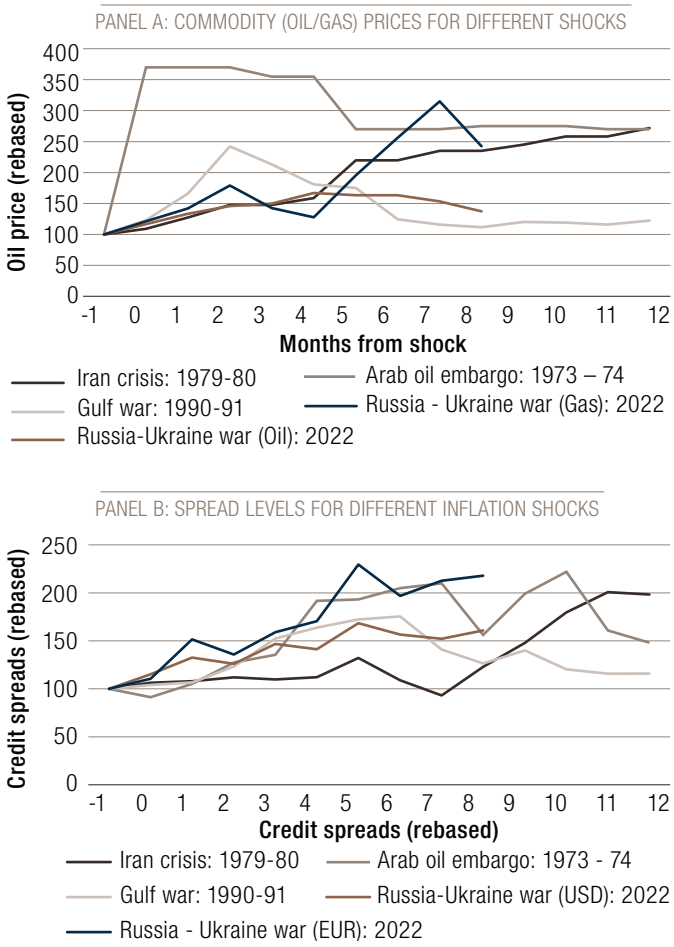


Source: Bloomberg, LOIM calculations.

[4] We measure the from the mid-2008 – the official drawdown of the S&P started in 2007 and peaked at over 50%.

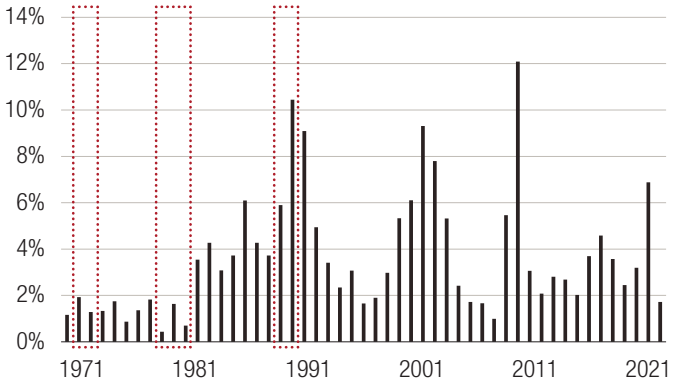
Next, we run a deeper dive into credit spreads during various commodity shocks to get a handle on spread scenarios. We identify three main shocks of decreasing intensity – the Arab crisis of 1973, the Iran hostage crisis of 1979 and the Gulf war of 1990. The commodity price levels is plotted in panel A of Figure 29. In the 1973 crisis, oil prices spiked to over 3-times the pre-crisis levels very rapidly. This was further exacerbated by the high energy intensity of GDP in the 1970s. The Iran crisis saw a spike that was comparable in magnitude to the 1973 crisis while the Gulf war impact was both lower in intensity and reversed more rapidly. The current crisis pales in comparison with respect to oil prices although gas prices, a key issue for the Eurozone economy but far less for the US, has increased to similar or even more extreme levels. In each of the shocks, credit spreads rose by around 100-150% before reverting. This is similar to the levels reach by EUR IG credit in the current crisis as seen in panel B of Figure 29. While spreads did rise and were elevated in past inflationary shocks, defaults remained benign in the 1970s as seen in Figure 30, where we plot annual Moody's speculative-grade default rates. It was only the saving and loans crisis on the back of the leveraged buyout (LBO) and 'junk' bond boom of the 80s that led to a spike in defaults in the late 80s and early 90s.

FIG. 29 SPREADS AND DEFAULTS – CASE STUDY OF COMMODITY SHOCKS



Source: Bloomberg, LOIM calculations.

FIG. 30 MOODY'S SPECULATIVE-GRADE DEFAULT RATES (1Y)



Source: Moody's annual default study.

To conclude – credit spreads in the 1970s doubled from their lows prior to the crisis. This is similar to the levels seen currently in Europe. In the absence of a banking or fragmentation crisis, we expect the current levels of spreads (~230bps in Europe and ~160bps in the US) to be the medium-term mean-reversion levels reflecting medium-term elevated risk premiums.

Credit – the early cycle performer

Corporate bonds are often represented as a combination of treasuries and equities as a proxy for credit exposure in a multi-asset portfolio. Credit exposures, while highly correlated with equities in the short run, have been shown to have some important differences with equities.

The first key difference is that credit tends to be an early-cycle performer in contrast with equities which is a late-cycle performer. The intuition is clear from the fact that corporations start the recovery by first repairing their balance sheet and prioritising the bondholder over the equity-holder. This also indicates that higher-rated credit tends to outperform in a beta-adjusted sense earlier than lower-rated (high-yield) credit. This intuition can be seen in in Figure 31 where we show that the risk adjusted performance of US IG and HY is at its highest in the recovery stage of the business cycle while equities' risk-adjusted returns peak in the expansion phase.

FIG. 31 PERFORMANCE AND SHARPE RATIOS BY BUSINESS CYCLE STAGE

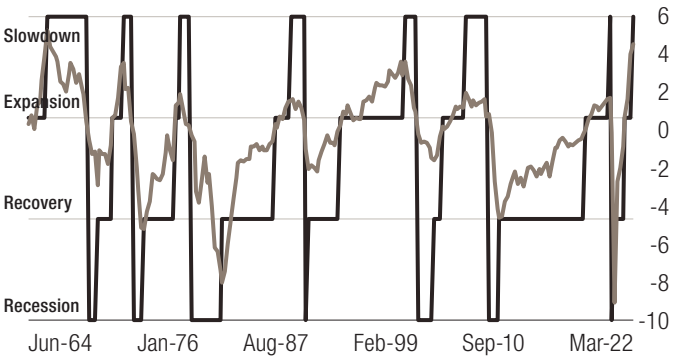
PANEL A: EXCESS RETURN (OVER CASH)

BUSINESS CYCLE STAGE	US EQUITY	US TREASURY	US IG	US HY	US CONVERT
Recession	-15.5	7.0	3.9	1.1	-2.4
Recovery	12.2	2.9	5.8	10.2	8.8
Expansion	13.4	0.5	1.0	2.2	4.4
Slowdown	-5.8	0.9	-0.5	-6.5	-3.5
Overall	7.8	2.1	3.1	4.4	4.7

PANEL B: SHARPE RATIOS

BUSINESS CYCLE STAGE	US EQUITY	US TREASURY	US IG	US HY	US CONVERT
Recession	-0.6	1.1	0.4	0.1	-0.1
Recovery	0.9	0.6	1.0	1.6	1.0
Expansion	1.0	0.1	0.2	0.5	0.5
Slowdown	-0.4	0.2	-0.1	-0.7	-0.4
Overall	0.5	0.4	0.5	0.5	0.4

PANEL C: BUSINESS CYCLE STAGES USING OUTPUT GAPS

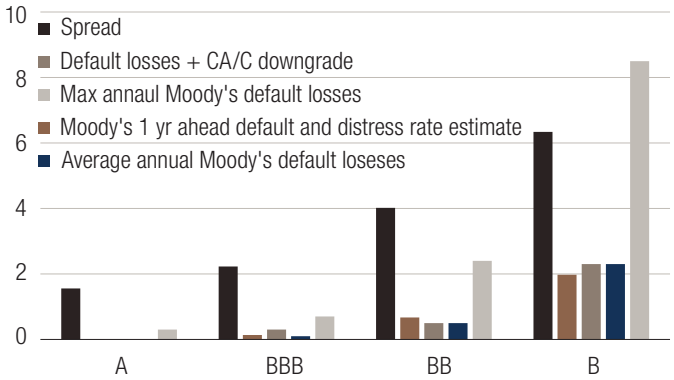


Source: Bloomberg, Conference Board, LOIM Calculations. Performances from period 1989-2022.

Credit spreads compensate for significant defaults and downgrades

Finally, we contrast fundamentals, in terms of potential for defaults, with valuations as measured by spread levels. Valuations remain fairly elevated and close to their 2022 peaks as of September-end. Figure 32 shows that credit spreads are well over 10-times that of the estimated default losses in BBB and 6-times for BB rated issuers. Even the worst-case annual losses experienced over the past 50 years are significantly lower than what is implied by current spread levels. This indicates that in a relatively benign scenario in which default revert to long term averages, the spread premium available is substantial.

FIG. 32 SPREAD VERSUS DEFAULT LOSSES BY RATING



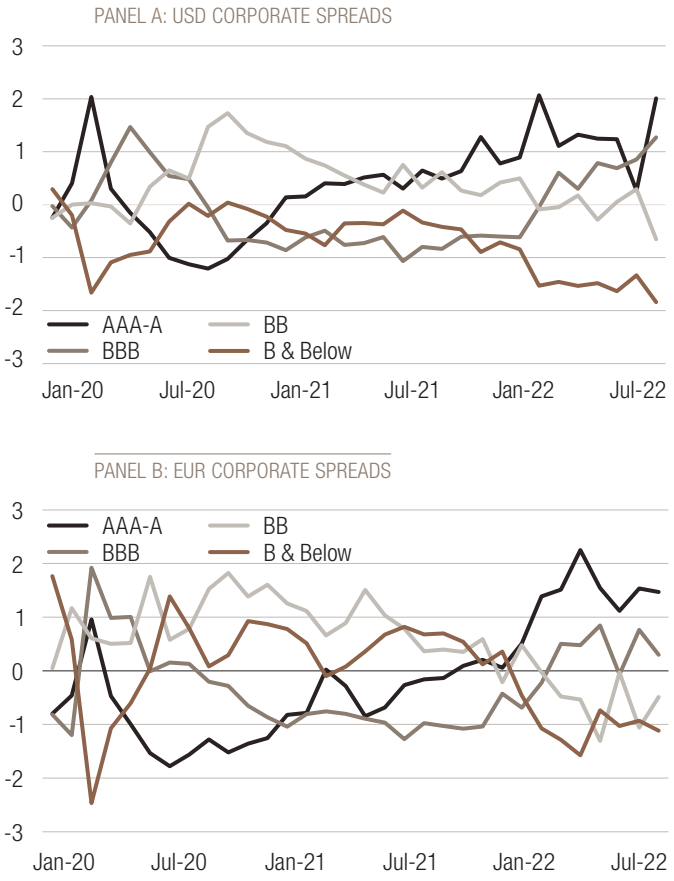
Source: Moody's, LOIM calculations. As of 20 October 2022.

Relative value opportunities have increased substantially

The overall credit market remains attractive, and we also see many areas of relative value opportunities. From a rating perspective, A and BBB rated assets look especially attractive with BB assets following particularly in Europe. In Figure 33 , we plot the average normalised spread ratio of an index of bonds for each rating category with every other rating category.[5] The average normalised spread-ratio captures how cheap or expensive each rating category is versus every other rating category relative to history. We finds that BBB assets have cheapened considerably in the past couple of months both in the US and Eurozone. Conversely, higher rated assets such as AAA-AA have become more expensive. AAA-AA assets tend to become more expensive from a combination of a flight-to-quality along with an increased demand for duration as real-rates start normalising.

[5] For example for BBB bonds, we calculate the spread ratio of BBB bonds with AAA-AA rated bonds and normalise this ratio over time. The normalised spread ratio therefore captures how cheap or expensive BBB bonds are relative to AAA-AA bonds. Similarly, we calculate the normalised spread ratio of BBB bonds versus A, BB, B and CCC-C rated bond indices and take the average to get the average normalised spread ratio.

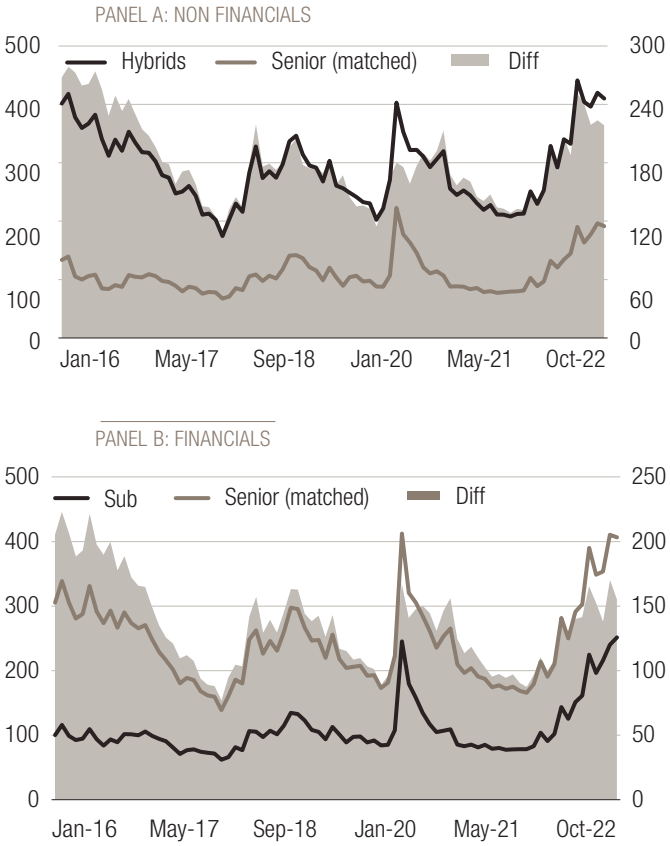
FIG. 33 NORMALISED AVERAGE SPREAD RATIOS



Source: Bloomberg, LOIM Calculations.

Another dimension for relative value opportunities is in subordination. A range of subordination categories exist within the credit universe for Financials and Non-financials. Familiar forms of subordinated debt are bank capital debt that includes Tier1, Tier2 and Contingent capital debt (CoCos). For non-financials, there is traditional subordinated debt as well as another class of subordinated debt called hybrid capital. Hybrid bonds have some equity-like characteristics with the issuer being able to extend the debt by at least 20 years after the first call date or postpone coupons in case of an adverse shock. As a result, hybrids provides a cushion similar to equity capital and is often given equity capital relief by rating agencies. Hybrid securities are issued by a range of non-financial sectors such as oil & gas, utilities, autos, telecoms, real estate as well as by insurance companies. In the current shock, hybrids have suffered more than other sub-debt, such as financial sub-debt, thereby provides an interesting relative-value opportunity. Due to the balance sheet benefits that they bring to their issuers, on top of the underlying corporate's fundamental quality, we believe that current levels are not just handsomely rewarding holders for remote default risks, but also for extension risks that we consider to be contained.

FIG. 34 SPREADS ON SENIOR VERSUS SUBORDINATED CORPORATE BONDS



Source: Bloomberg, LOIM calculations.

Scenario analysis

In this section, we build a number of scenarios for credit and interest rates. We estimate 12-month returns for a selection of our strategies based on these scenarios. We use 20 October 2022 as our pricing date for the forward looking analysis. The strategies analysed include Fallen-Angels, Swiss Credit, Global Fixed Income Opportunities (GFIO) and Global Target Net Zero (TNZ). **We use the allocations and risk exposure in the current strategies to estimate future returns.**

The four strategies reflect a range of both credit and rate risk exposures. As a largely BB-rated strategy, Fallen Angels is the most geared towards credit risk. The TNZ Global strategy lies between fallen angels and crossover, with an average BBB-rated risk profile, while at BBB+, GFIO's average rating profile is more investment grade.

In Figure 35, we outline four potential scenarios and their implication on interest-rates and credit spreads over the next 12-months. Note that we estimate credit spreads and interest rates effectively at the end of September 2023 and not peak interest-rates or credit spreads over the next 12-months. Indeed, there remains a risk of a policy mistake that can result in spreads overshooting in the short term. However, financial stability considerations for central banks coupled with the generally stronger position of banks in previous crises makes the likelihood of extreme spread levels, such as those seen generally in financial crises, less likely in our view.

FIG. 35 SCENARIOS FOR THE NEXT 12-MONTHS

Soft landing (optimistic)

- Growth rebound after a short dip in 2022 – recession avoided
- Demand remains robust while supply-side squeezes abate
- Central banks pause their hiking cycle as inflation abates
- Defaults remain below long-term averages

Persistent inflation (base)

- Mild recession in Europe and in the US
- Fragmentation risk contained by the ECB
- Economy to bottom out mid-2023 with markets leading by 2-3 quarters
- Inflation peaking by end-2022 and then coming down although remaining sticky and above target (3%)
- Defaults increase to long-term averages but remain contained

Cyclical recession

- Moderate recession in Europe, mild in US
- Demand drops substantially
- Supply-side squeezes abate bringing inflation down rapidly
- Central banks loosen monetary policy to support growth
- Defaults above long-term averages

Stagflationary recession (pessimistic)

- Deeper recession in Europe and a moderate recession in the US
- War in Ukraine drags on or escalates
- Economy to bottom out end-2023
- Continued supply-side squeezes keeps inflation high (above 5%)
- Central banks forced to maintain tight monetary policy
- Defaults above long-term averages

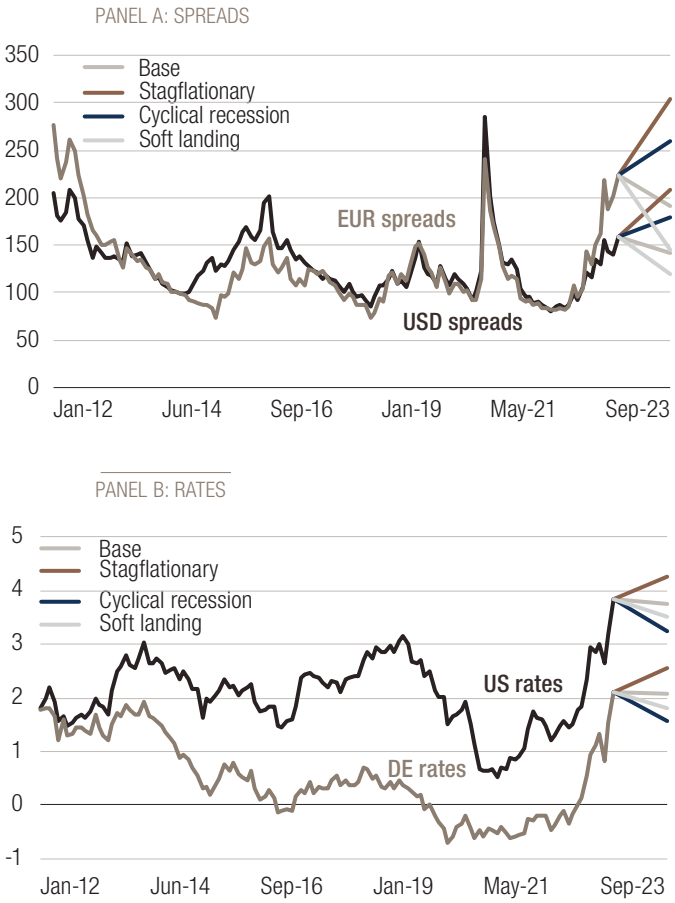
	SOFT LANDING (OPTIMISTIC)	PERSISTENT INFLATION (BASE)	CYCLICAL RECESSION	STAGFLATIONARY RECESSION (PESSIMISTIC)
US/EUR rates (10y)	3.75%/2.06%	4.00%/2.31%	3.50%/1.81%	4.5%/2.81%
USD credit spread moves compared to 20 Oct 2022	-25% [120/410 bps for IG/HY]	-10% [140/490bps for IG/HY]	13% [180/630 bps for IG/HY]	30% [210/725 bps for IG/HY]
EUR credit spread moves compared to 20 Oct 2022	-35% [145/450 bps for IG/HY]	-15% [190/550 bps for IG/HY]	15% [260/710 bps for IG/HY]	35% [300/820 bps for IG/HY]

Figure 36 shows the level of spreads and interest rates over the past ten years, together with extrapolated spreads and rates under our four scenario forecasts. The previous ten year period encompasses three additional significant credit selloffs, in the shape of the 2016 commodities crisis, 2018 tightening episode and the 2020 Covid crisis. It should be noted that the interest rate in even the most benign of our four scenarios is significantly above peak interest rate levels reached during the 2018 tightening event. Similarly, for credit spreads, the stagflationary scenario assumes euro spreads at 300bps, well above Eurozone peaks of 247bps during the Covid-19 crisis. These spreads levels are unprecedented outside of banking crises and are close to the 350bps peaks at the height of the Eurozone crisis. It should be noted that such levels would imply a clear policy mistake having been made, with financial stability issues coming to the fore.

To estimate future total returns under the four scenarios, we calculate and combine returns from carry, mark-to-market (price returns) and default losses. Carry is estimated using current spreads and rates, adjusted for currency hedging costs. For mark-to-market returns, we use current allocations and exposures to estimate the return impact of spread and interest rate changes.

We assume credit spreads move proportionately across geographies. This takes into account the more negative economic outlook for Europe, since European spreads are currently 30-40% higher than US spreads; we therefore expect spread increases to be higher for Eurozone than for US corporates. Finally, rates are assumed to move roughly in line, reflecting similar year-to-date increases in the US and German 10-year rate. Figure 37 presents the projected performance under the four different scenarios across four different funds: Fallen Angels, Global Crossover, TNZ Global and GFIO.

FIG. 36 SPREAD AND INTEREST-RATE SCENARIOS



Source: Bloomberg indices, LOIM Calculations.

FIG. 37 RETURN FORECASTS OF FOUR STRATEGIES ACROSS THE FOUR SCENARIOS

	SOFT LANDING (OPTIMISTIC)	PERSISTENT INFLATION (BASE)	CYCLICAL RECESSION	STAGFLATIONARY RECESSION (PESSIMISTIC)
FALLEN ANGELS RECOVERY (EUR HEDGED)				
MTM[1]	6.0%	2.6%	0.6%	-6.1%
CARRY[2]	5.4%	5.3%	5.5%	6.3%
TOTAL	**11.4%**	**7.9%**	**6.1%**	**0.2%**
GLOBAL CROSSOVER (EUR HEDGED)				
MTM[1]	8.1%	3.5%	1.3%	-8.1%
CARRY[2]	5.6%	5.8%	6.1%	6.9%
TOTAL	**13.7%**	**9.3%**	**7.4%**	**-1.2%**
GLOBAL TARGET NET ZERO (EUR HEDGED)				
MTM[1]	6.6%	2.9%	2.3%	-6.4%
CARRY[2]	4.3%	4.4%	4.6%	5.4%
TOTAL	**10.9%**	**7.3%**	**6.8%**	**-1.0%**
GLOBAL FIXED INCOME OPPORTUNITIES (EUR HEDGED)				
MTM[1]	4.2%	1.8%	0.8%	-4.1%
CARRY[2]	4.6%	4.8%	4.8%	5.5%
TOTAL	**8.8%**	**6.6%**	**5.6%**	**1.3%**

[1] MTM effects include the impact of default losses.
[2] Carry uses the spreads and duration levels as on 20 October 2022.

The key point to note from Figure 37 is that the significant amount of carry for all strategies offsets even large mark-to-market losses, such as those in the stagflationary scenario. In fact, in the relatively low risk / low duration strategies like GFIO, even the stagflationary scenario, which implies a well over 100-150bps increase in yields, results in a positive 0.7% return. For high carry strategies such as Fallen Angels, Global Crossover and to an extent TNZ Global, the carry buffer ensures positive returns in all but the most extreme scenario.

Of course, the four scenarios we outlined may not be the only possibilities for credit spreads and rates going forward. A heat map of scenario outcomes can help determine the sensitivity of strategy return to terminal rate and credit yields and provides a better visual representation of scenario returns.

Figure 38 shows such a heat map of scenario returns for the higher spread (but lower duration), high-quality, high-yield Fallen Angels strategy (BB), as well as for the longer duration Global Crossover strategy (BBB-BB). As you can see, expected returns are positive for all except the stagflation scenario for both strategies.

The Fallen Angels strategy is estimated to deliver positive returns in almost all scenarios, with high carry offsetting the impact of negative mark-to-market returns in the more adverse scenario of yield increases. We assume an additional yield increase of 100-150bps over the next 12 months for both strategies in the most adverse scenario. The higher 6.5-year duration for Global Crossover (compared to Fallen Angels' 4.5 years) means the market impact is greater, leading to a -1.2% return in the worst-case stagflationary scenario.

FIG. 38 HEAT MAP OF PERCENTAGE CHANGES IN SPREADS FOR GLOBAL CROSSOVER AND FALLEN ANGELS STRATEGIES

PANEL A: GLOBAL CROSSOVER (EUR)

% CHANGE IN SPREADS (FROM 20 OCTOBER 2022)

US/DE RATES	-35%	-25%	-15%	-5%	5%	15%	25%	35%
3.25 / 1.56	16.3	14.9	13.3	11.9	10.4	8.7	7.1	5.4
3.50 / 1.81	15.0	13.6	12.0	10.6	9.1	7.4	5.7	4.1
3.75 / 2.06	13.7	12.3	10.7	9.3	7.7	6.1	4.4	2.8
4.00 / 2.31	12.3	10.9	9.3	7.9	6.4	4.7	3.1	1.4
4.25 / 2.56	11.0	9.6	8.0	6.6	5.1	3.4	1.8	0.1
4.50 / 2.81	9.7	8.3	6.7	5.3	3.7	2.1	0.4	-1.2

PANEL B: GLOBAL FALLEN ANGELS

% CHANGE IN SPREADS (FROM 20 OCTOBER 2022)

US/DE RATES	-35%	-25%	-15%	-5%	5%	15%	25%	35%
3.25 / 1.56	13.1	12.0	10.4	9.3	8.2	6.9	5.7	4.4
3.50 / 1.81	12.2	11.2	9.6	8.5	7.4	6.1	4.9	3.6
3.75 / 2.06	11.4	10.3	8.7	7.7	6.5	5.3	4.0	2.8
4.00 / 2.31	10.5	9.5	7.9	6.8	5.7	4.4	3.2	1.9
4.25 / 2.56	9.7	8.6	7.0	6.0	4.8	3.6	2.3	1.1
4.50 / 2.81	8.8	7.8	6.2	5.1	4.0	2.7	1.5	0.2

PANEL C: SCENARIO SPREADS

% INCREASE IN EUR SPREADS (FROM 20 OCTOBER 2022)

US/DE RATES	CURRENT	-35%	-25%	-15%	-5%	5%	15%	25%	35%
US IG Corp spreads: bps	163	112	126	141	156	170	185	200	214
EUR IG Corp spreads: bps	228	148	171	194	217	239	262	285	308
US HY spreads: bps	500	343	388	433	478	523	568	613	658
EUR HY spreads: bps	611	419	474	529	584	638	693	748	803

Source: LOIM Calculations, as at 20 October 2022.

Conclusion

The year 2022 will go down as a historic year for fixed-income assets, in light of the largest drawdowns observed in over 40 years. A confluence of factors forced yields to rise at an unprecedented rate, upending a benign period spanning more than a decade. Inflation shocks from Covid, reopening demand and broken supply chains were supercharged by the war in Ukraine. This was countered by extreme central bank hawkishness as they belatedly tried to bring inflation expectations down. These events have proved to be a perfect storm for global fixed-income.

Corporate bonds are a combination of risks – namely interest-rate risk and credit risk. These two have historically diversified each other, reflecting the role of central banks as a countercyclical force supporting the economy with rate cuts and QE. The reversal of this role in the face of rising inflation, as indicated by an unprecedented rise in real rates, has resulted in a selloff for both sources of risk. From a forward-looking perspective, we are much more optimistic about these two sources of risk, particularly when considered in tandem. While the economic environment is expected to worsen further, it is important to note that financial markets tend to lead the real economy by 6-9 months. In addition, a worsening of the economic environment is also likely to reduce inflation pressures and allow the central bank reaction function to become less hawkish. Therefore, while credit spreads can increase further, we believe that the combination of spreads and rates, or in other words corporate bond yields, are close to peaking.

From the perspective of rates, risks appear to be relatively balanced with most large central banks moving toward restrictive territory. This, in combination with the higher levels of yields achievable, limits further losses from an exposure to duration. If peak central-bank hawkishness is near, as we believe to be the case, we can expect duration exposures to provide diversification to credit selloffs.

From the perspective of credit, we see that credit spreads have increased significantly with investment-grade spreads over 2-times its Dec-2021 levels in the Eurozone and 70% higher in the US. The increase in spreads in the Eurozone in 2022 is comparable to what was realised in the commodities shocks of 1973 and 1979. The rise in credit spreads provides a buffer to the risk of even severe downgrades in IG and defaults in HY. Credit fundamentals are relatively strong, with the post-pandemic liquidity injection by central banks allowing companies repair their balance sheets and term out their debt structures. While a fundamental deterioration is inevitable, this appears to be well priced in investment-grade and in the higher end of high-yield (BB).

Indeed, we acknowledge that while spreads are highly elevated, they are well short of the peaks achieved during the Eurozone crisis and the global financial crisis. However, another important factor that mitigates a further move wider in credit spreads is the health of banks. As we show in our comparison between banking crises and commodities shocks, a banking crisis tends to be much more detrimental for credit relative to other risk assets such as equities. Indeed, both the highest spread levels, as well as the largest default losses, were experienced in periods of banking crises or potential banking crises. As a final point, we see that the recent moves in credit spreads have been systematic with controlled idiosyncratic risks. Excessive moves wider can often be driven by poor market liquidity. Whilst this can generate short term price drawdowns, in the medium term we would expect these to correct and produce favourable returns.

To conclude, we believe that corporate bond yields are close to an inflection point, with the high levels of yields achievable providing a buffer to further yield rises. While painful, 2022 has also brought with it an end to the 'search-for-yield' that had plagued the previous decade. Significant yields are now available in all currencies (USD, EUR, GBP and even CHF) from a combination of higher risk-free rates as well as higher credit spreads. The compression of risk-premiums that were a consequence of the unprecedented liquidity injections of central banks has reversed.

In short – the corporate bond is back.

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