

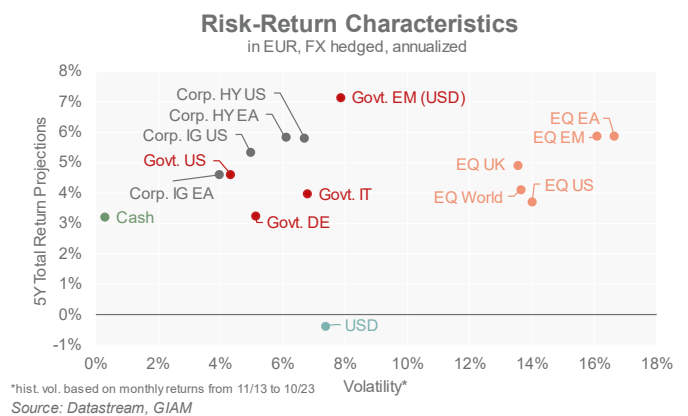
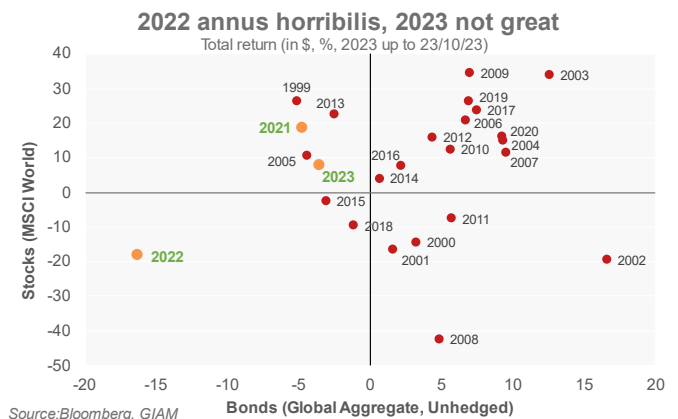
CORE MATTERS

The Power of Yield –
our 5-year return forecasts

GIAM Macro & Market Research
October 26, 2023

Our Core Matters series provides thematic research on macro, investment, and insurance topics

- It looks like the Global Aggregate index will end 2023 below water for a third consecutive year (top chart): there has been no bounce back from the historically large drawdown of 2022. Fixed income markets have paid a dear price for successive supply chain disruptions and the adventurous policy mix of the past years, characterised by a massive global policy easing through the pandemic and a sharp divergence between US fiscal and monetary policy over the past 18 months.
- The future is always uncertain, but maybe even more so now that the World Order is changing fast: the US hegemony is contested, conflicts and wars have burgeoned, and the security of supply chains now matters as much as their efficiency. All this may change the growth-inflation mix – in a bad way.
- Even though we raised our estimate of equilibrium rates in the medium term, the now much higher level of yields makes Fixed Income more attractive in terms of 5-year risk-return, especially Cash, Treasuries, and IG Credit. We acknowledge that public debt sustainability concerns may justify lower than average credit and equity risk premia (vs. Govies) in the future, but investors will likely not get paid enough for credit and equity risk on a 5-year horizon. For those accepting the risk, returns on EM hard Currency rank highest.
- Among a plethora of risks, two stand out. First, yields may stay high(er) for longer on stubborn inflation expectations, lavish central banks or renewed stagflationary shocks (BTPs most exposed). Second, cracks in the financial plumbing, emanating from the higher cost of rolling debt over and large unrealised losses across investor books, could trigger a deeper recession or – worse – an outright financial crisis (risk assets most exposed). On the bright side, a Goldilocks scenario (soft landing, quick disinflation), would be more bullish for Equities and HY Credit.



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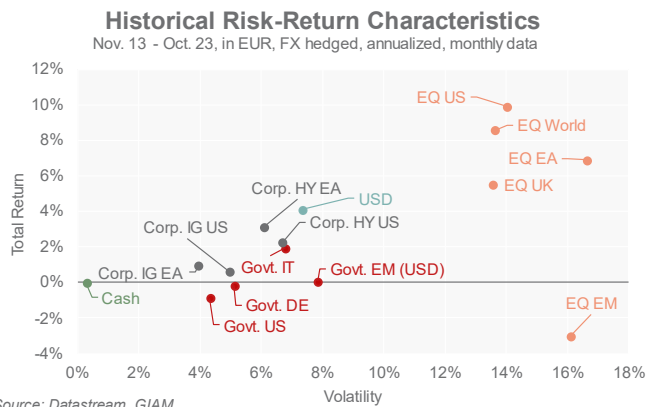
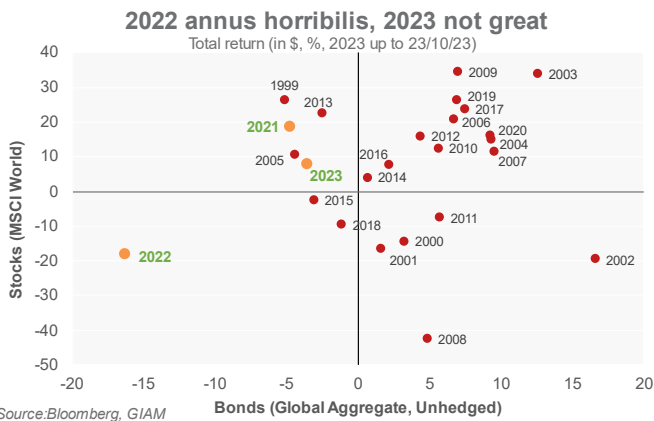
1. Introduction

The suffering continues. We warned in this same annual report, [a year ago](#), that investors were “not out of trouble just yet”. Long-only investors will remember 2022 as ‘annus horribilis’, with both stocks and bonds suffering large drawdowns – in bonds to an extent unseen modern times (chart below). As we go to press, the Global Aggregate bond index is set to close a third consecutive year of negative return – in sharp contrast to the post Volcker bond bonanza that saw four decades of falling bond yields. At least the MSCI World has delivered a return of 7.5% so far in 2023, though those gains

resilient in the context of a sharp monetary tightening, and equity valuations have risen despite the ongoing surge in long-term *real* bonds yields. Ample usage of large excess savings, an expansive fiscal policy and strong corporate balance sheets have offered protection, but those tailwinds are fading. We still expect the surging yields and energy prices to take their toll on the economy and financial system. In particular, the exceptionally large drawdown in Fixed Income indices – the Global Agg total return index is down 23% from the early 2021 peak – has created heavy unrealised losses across the system; those tend to become problematic when liquidity imperatives lead to force selling, de facto realising those losses. In this uneasy context, global risk assets such as equities and High Yield credit appear unattractive.

The lost decade. The graph below measures the extent of the Fixed Income rampage. The drawdown of the past 3 years has been so large that Treasuries, hedged in EUR, have delivered a negative total return over the past 10 years. German bonds have essentially returned 0% over the decade, and IG Corporate credit marginally positive annual gains. In contrast, the outperforming US equities, hedged in EUR, have delivered 10% annually. Emerging market have dramatically lagged in the equity space.

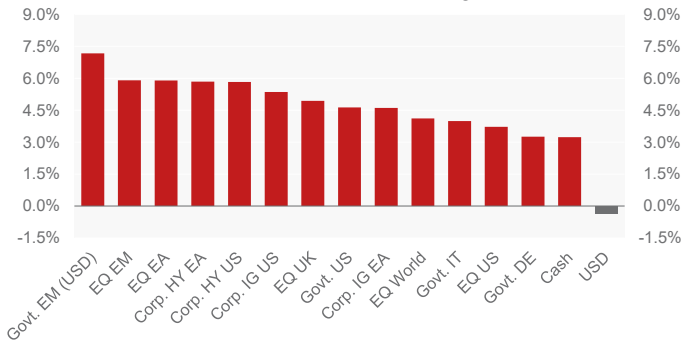
A lost decade for bonds, following the massive drawdown of the past 3 years



Looking forward – the power of yield. At least the surge in yields is now offering something that investors cherish: income or carry. And they may also enjoy capital gains if, as we believe, bond yields finally start to “mean revert.” The chart below shows our expectations for total return over the next 5 years, with EM Hard Currency debt in the lead, thanks to the generous Yield-to-Worst, and the expected pullback in risk-free yields. One striking feature of our forecasts is that investors will only get a very marginal extra return for going up the risk scale: in our books, the distribution of 5-year annual liquid asset returns is concentrated in a narrow 3% to 7% range.

Total Return Projections

5Y annualized, in EUR, FX hedged

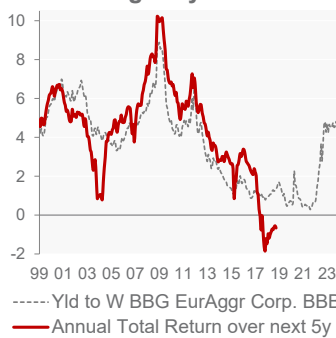


Source: Datastream, GIAM

Valuation matters in the medium term, if less so in the near term. This report offers details about the source of returns in each asset class; the two charts below simply show how important valuation at inception point is. For instance, the BBB Euro Aggregate index return over 5 years largely depends on the Yield-to-Worst at the start of the period; the annual return of the past 5 years has undershot because the brutal rise in yields has caused capital losses (more than offsetting the income earned through coupons). That same index now offers a yield of close to 5%; assuming those bonds will also generate capital gains, investors can expect decent returns indeed.

The second chart shows that the S&P 12-month forward earnings yield at inception is a great predictor of medium-term performance (this works better over 10 years than 5 years, though). That earnings yield is now standing around 5.5%, a mere 60bp only above the 10-year Treasury yield: a very small risk premium indeed.

BBB corporates offer much higher yields now



Source: Bloomberg, GIAM calculations

Valuation leads S&P return



Source: S&P, Bloomberg, GIAM

A new paradigm? Such low level of risk premium begs the question of whether government bonds should still be considered as risk-free assets. While global private debt (corporations and households) has followed a muted trend over the past 15 years, public debt has surged through the Great Financial Crisis and the pandemic. With 10-year real yields up

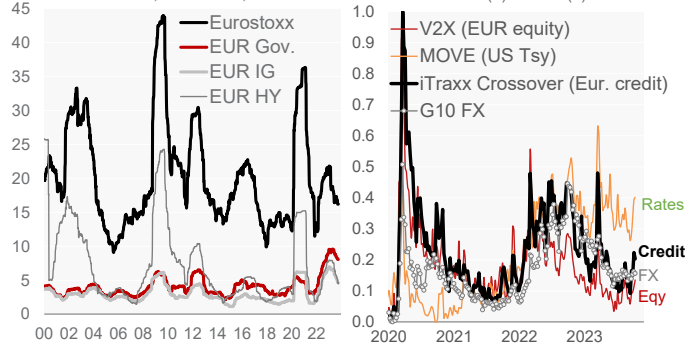
by around 300bp and 350bp respectively in the EA and the US since early 2022 (to near 1% in OATi and 2.50% in TIPS), debt sustainability concerns are rising, and more so that the dual transition to a multipolar world and clean energy will require heavy military and infrastructure spending. Those concerns may support the idea of lower risk premia, going forward.

Public debt sustainability concerns make risk-free asset concept shakier

Bonds will rise from the ashes, though. The appalling performance of bonds can be sourced in fundamental factors such as the inflation revival, the sharp monetary policy tightening that has followed, and the heavy supply emanating from large public deficits in need of funding. In short, the bond debacle has been the collateral damage of an adventurous policy mix, with the pandemic-related supply chain strains and the war on Ukraine acting as triggers and amplifiers. Some of these forces may persist, e.g. public deficits and inflation may stay higher for longer (ineffective policy making and rising populism, security of the supply chain, energy transition etc.).

Realised volatility

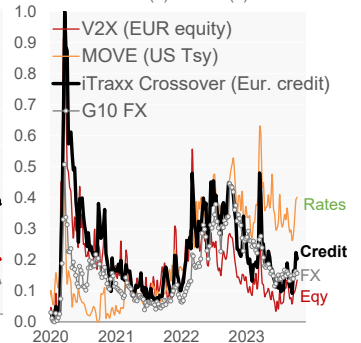
52-week, annualised, %



Source: Bloomberg, GIAM calculations

Implied volatility

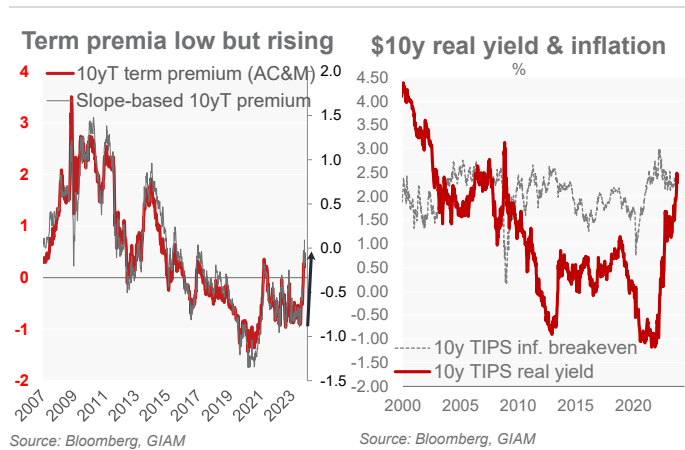
Relative to MIN (0) & MAX (1) since 2003



Source: Bloomberg, CBOE, JPM, GIAM calc.

That said, some of the factors that have plagued “risk-free” bonds will not be permanent. Bond volatility, both realised and implied, has surged to levels that appear elevated both on a historical and cross-asset basis (see charts above). We expect this to normalise beyond policy rate peak (likely reached already on both sides of the Atlantic). Also, the bond diversification benefit disappeared in 2022, and again in fall 2023, when stocks and bonds fell in sync. Such poor correlation environment tends to support a rise in the bond term premia, and this has contributed significantly to the bond sell-off indeed. Arguably, various measures of the 10-year Treasury term premia suggest that it has increased by some 150-200bp from the lows but is still not high by historical standards (left-hand chart below). Still, despite all the focus on the inflation crisis, it is important to recognise that it is not so much the

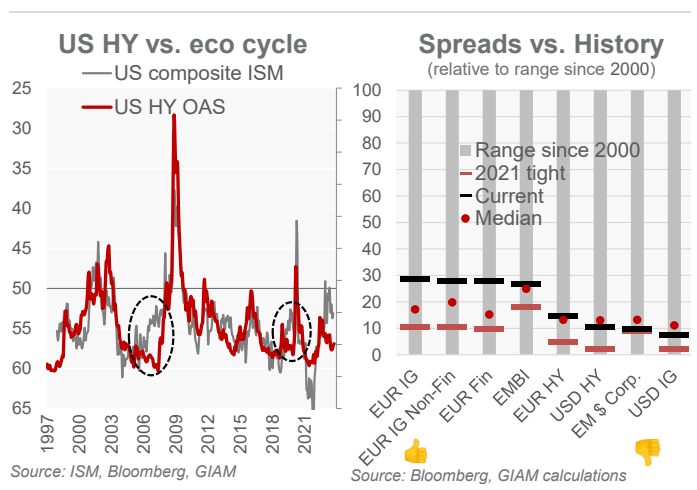
inflation component of nominal bond yields that has surged, but the real yield component (bottom-right chart).



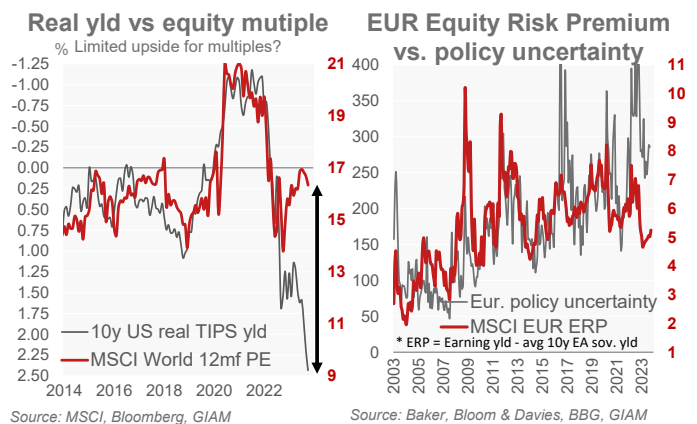
This surge in long-term real yields is filtering through the economy and financial system more slowly than usual because private balance sheets stayed contained, in contrast for instance to the pre-GFC period. But we still expect the economic and financial pain to act as a restraining force and cap bond yields eventually. Just consider this: the 3-month USD OIS rate, 5-year forward, is trading near 4.50%. This is 200bp above the Fed's mid-term dot and reflects the considerable risk premia that investors are attaching to future policy. We do expect some normalisation once the economy hits the wall of financial instability picks up.

Attractive low-risk yields and relative valuation means investors will not get much extra return for taking credit and equity risk

You may not get paid enough for extending credit risk... First, even though it has started to pick up, implied volatility in credit, like in equity, looks low, at this shakier point of the cycle. Any further pick-up would penalise the riskier segment. Second, as the left chart below shows, High Yield spreads also look tight relative to the position in the economic cycle (and the ongoing rise in default rates). Third, from a historical point of view, EUR Investment Grade spreads trade well above the median over the past 20 years, while High Yield markets trade more richly, especially in the US (right-hand chart). So in the near term, our preference goes to IG credit. Over the full 5-year horizon, the starting point that sees the Global High Yield index offer a 10% yield to worst (up from a record low 4.15% by mid-2021) should help it outperform IG – but just so.



... or for taking equity risk. We expect EA equities to deliver some 6% per annum over the next 5 years, and US equities a bit less given the extreme valuation differential and the cost of FX hedging. This is well below historical standards for US equities, owing to the valuation effect highlighted above. More specifically, the full divergence between long-term real yields and US equity multiples in 2023 (left chart below) makes us prudent for the near-term outlook and is a tailwind even over 5 years. The equity yield and risk premium (ERP) are more



generous in the Euro Area, yet again not particularly attractive in the context of a weak near-term growth outlook, large policy uncertainty, and changing world economic order (poorer growth-inflation mix) – see right-hand chart above.

2. Macro Backdrop

The shocks from the pandemic and the war in Ukraine have abated, but persistently higher inflation, a rise in real equilibrium interest rates (R-star) burgeoning geopolitical risks are all preventing a return to the pre-pandemic environment.

Past shocks largely digested. Already towards the end of 2022 firms had largely managed to restore their supply

chains. Delivery times for intermediate products improved, boosting production as the huge stock of orders were worked through. European countries managed to substitute Russian gas supply quickly and surprisingly smoothly, driving down prices. Gas storage is high and well above the threshold of 90% established by the European Commission ahead of the Winter 2023/24. That is good news, if not enough to fully protect Europe from the risk of an escalating Middle East crisis.

Inflation is receding ... The energy price shock had pushed headline inflation rates into double-digit territory on both sides of the Atlantic by fall 2022. Yet, fading energy supply concerns and a mild winter contributed to a moderation of energy prices, giving rise to disinflationary base effects. Moreover, pipeline pressure has come down significantly, strengthening the case of receding inflation.

... but underlying inflation is stubbornly high. Underlying price pressure is normalising much more sluggishly. The key reason is high wage growth amid a healthy labour market. In the euro area for instance, negotiated wages have powered ahead, now up by more than 4% yoy, an unprecedented strength. This reflects to a high degree the response to the 2022 inflation tsunami. Worryingly, demographics will dent the working force over the coming years. Firms also adjust to a potential shortage through the hoarding of labour. As a result, bargaining power for employees will stay high. Strong wage growth is likely to persist, keeping core inflation higher than pre-Covid. All in all, we expect inflation to move only slowly towards target over the coming years.

Markets agree that the low inflation environment is over. Markets have already adjusted to the new inflation environment. Inflation expectations over the medium and long term have stabilised at elevated levels (15 to 30y EUR breakevens, which include an inflation risk premium, are even above 2.5%). The ECB Survey of Professional Forecasters anticipates average inflation at 2.1% over five years and – unlike in the past – sees the risks clearly tilted on the upside.

Hamas-Israel war might lift inflation again. Short-term the inflation picture might even worsen. The Hamas-Israel war already pushed oil and gas prices up, adding to the upward pressure emanating from OPEC+ supply cuts. Depending on the duration and degree of potential spill-over to other countries the war could induce another energy price shock, further postponing the normalisation of inflation.

More volatile inflation on the horizon. More broadly, over the coming years political tensions will affect not only commodities but good prices in general. Confrontation between China and the US will likely lead to a scaling down of the global production network which was instrumental in delivering low inflation in the last two decades. This may not only

raise inflation but also make it more prone to supply shocks, that are out of scope for monetary policy. Those risks should be reflected in risk premia indeed.

Growth to trend lower. Potential growth will suffer from a falling working population in this decade, especially in Europe. Accelerated digitalisation and AI may boost productivity, but the net effects tend to be delayed and hard to quantify. We expect population dynamics to gain the upper hand and drive potential growth down, from currently 1.4% to 0.9% in the euro area. Better demographics should keep US trend growth at around 1.8%.

A tricky situation for central banks. Amid slowing trend growth, inflation will remain elevated and may not fall below the target of 2% over the coming five years. As we expect central banks to remain committed to this target there will be less room for policy accommodation compared to the previous decade.

Persistent headwinds from monetary policy

Fed and ECB to keep key rates high. The Fed and the ECB have lifted their policy rates by 5.25% and 4.50% respectively in order to bring inflation back to target. Given sticky underlying inflation we expect both central banks to keep current peak rates well into 2024 and to reduce them only sluggishly over the forecast period, with rates unlikely to fall below 2.5% (Fed) and 2.0% (ECB) in our core scenario.

ECB balance sheet reduction a lengthy process. The ECB has already started to reduce its balance sheet from a peak € 8.8 tr in mid-2022 to € 7.2 tr as of now. Looking ahead, output and credit growth alone mechanically imply some balance sheet expansion as the monetary base grows along with transaction needs. Additionally, the need for a structurally higher ECB balance sheet is likely to come from the switch to a floor system in money market operations, which may be made permanent. Even taking these factors into account our calculations suggest that the balance sheet should recede to about € 5 tr by 2028. For the euro area we therefore assume that quantitative tightening (QT) will continue over the coming years. However, keeping financial stability considerations in mind our central case is one of passive QT only, with outright bond sales unlikely. The Governing Council explicitly stated that rates were the key policy tool. We expect passive QT of the assets bought under the Pandemic Emergency Purchase Programme (PEPP) to start by January 2025, adding to the ongoing APP reduction. This makes QT a moderate but persistent headwind for economic activity.

Fed balance sheet reduction done in 2024. The reduction in the Fed's balance sheet is already well underway and has proceeded smoothly. We expect it to end by mid-2024, in conjunction with a first rate cut. Bond purchases may already restart in late 2025 as the Fed aims at keeping excess reserves

2028 macro and central bank scenario

Item	Euro area		US	
	current	2028 proj	current	2028 proj
Equilibrium real short term rate (r*)	0.9	1.0	0.6	0.9
Inflation (HICP, core PCE for US)	5.3	2.0	3.3	2.0
Potential growth	1.4	0.9	1.8	1.8
Neutral Central Bank policy rate	6.2	3.0	3.9	2.9
Current real short term rate (r)	-1.6	0.3	2.0	0.7
Current nominal short term rate (ESTR, SOFRE)	3.65	2.3	5.3	2.7

Source: Datastream, GIAM calculations

at around 23% of GDP. It is a slightly higher value than the pre-pandemic norm (19%), as we expect that the central bank will take a more cautious approach on the reserve buffer for the banking sector.

Putting monetary policy stance into perspective – assessing “R-star”. Our projected key rates look relatively high compared to the past decade’s levels. But it needs to be put into perspective against R-star, or the equilibrium real short-term interest rate. Empirical estimates of R-star are subject to high uncertainty and vary considerably within and across model classes. As we explain in greater detail in a recent [study](#), we expect R-star to inch up only marginally from current levels to near 1% in the euro area and the US by 2030. The rise in EUR inflation expectations relative to the post-GFC nadir and the tighter monetary policy (R-star not fully exogenous) will more than offset the dampening effects from falling potential growth. We expect the net effect of climate change on R-star to remain small. Our projected short-term real rates by 2030 are somewhat below these benchmark estimates, as we assume a mild monetary stimulus will be needed to offset a persistent drag from fiscal consolidation.

A much more persistent inflation overshoot remains the most relevant risk

Medium term uncertainties remain exceptionally high. The highest risk emanates from a much more persistent overshoot in inflation that may force central banks to keep rates even higher for longer. Geopolitical tensions, notably the Hamas-Israel war, add to the risk of a stagflationary shock from soaring energy prices. A second key risk lies in a fractured financial plumbing, following the drastic key rate hikes. The

woes from SVB/Credit Suisse collapse proved short-lived, also thanks to improved regulation of the banking sector. But more [vulnerabilities are looming](#) in the shadow banking sector and commercial real estate, which could still ignite broader trouble also for major advanced economies.

3. Financial return expectations

Resorting to a top-down approach, we use our growth, inflation, and central bank forecasts as anchor points for deriving the updated 5-year total return expectations. We subsequently revisit key liquid asset classes for euro-based investors, including Government Bonds (EA, US, EM), Credit (US and EA), Equities (various markets) and FX (focus USD). We do not hereby cover unlisted assets and/or alternative assets. A more detailed description of the underlying methodologies is provided in our original [5-year return report](#).

3.1 Fixed income assets: higher returns for longer

Attractive valuations. After three years of negative performance, we expect significant positive returns for fixed income over the next five years. The higher-for-longer narrative has not affected our positive 5-year stance from last year. Yields have overshoot our forecasts, and the higher coupon and pull-to-par effect imply an upward revision to our core government return expectations. On average, expected fixed income returns are still close to or sometimes higher than predicted equity market returns, with EM and US HY leading the forecasts.

Asset Class	Coupon	Mark to Market*	Valuation adj.**	Credit migration	Credit default	Overall***
German Government Bonds	1.9	0.8	0.6			3.3
Italy Government Bonds	3.5	1.0	-0.5			4.0
US Treasury Bonds	3.2	1.1	2.0			6.2
Euro IG Corporate Bonds	3.0	1.2	0.5	-0.1	-0.1	4.6
Euro HY Corporate Bonds	5.7	1.7	0.5	-0.2	-1.8	5.8
US IG Corporate Bonds	4.7	0.8	1.6	-0.1	-0.1	6.9
US HY Corporate Bonds	7.3	1.2	1.1	-0.2	-2.0	7.4
US EM External Sov. Bonds	7.1	0.7	1.7		-0.7	8.8

*roll and pull-to-par effect
 **changing yield level at a certain time
 ***annualized returns over 5 years in local currency and in %

Indeed, fixed-income assets are now offering more attractive valuations, especially after the recent acceleration of the rate sell-off. The bulk of the return should come over the next couple of years as bond yields “normalises”. If confirmed, these returns would be close to their 20-year highs.

Our fair values for fixed-income yields continue to rely on multiple approaches based on fundamentals, forward, and long-

term averages. We have increased our fair values for government bond yields, driven by an upward revision in the equilibrium real short-term interest rate (r^*), particularly in Europe. Spread forecasts are broadly stable or revised slightly higher from last year, reflecting only minor changes in credit risk. Despite the higher r^* , our new long-term fair values for core yields are well below current levels.

The risks are skewed towards a slower normalisation. There has been intense debate about the effective level of r^* . However, it remains the case that core government bonds now benefit from higher coupons or yield to maturity, which provides a cushion in the event of a negative mark-to-market contribution from the change in the yield component.

Asset Class	FV Approaches				5Y Forecast		
	Currency	Current*	Regression	Forward	LT average	FV **	Applied
German Government 3-year	EUR	2.83%	2.25%	2.60%	-0.10%	2.15%	2.20%
German Government 10-year	EUR	2.72%	2.58%	3.03%	0.53%	2.50%	2.50%
Italy Government 3-year	EUR	3.92%	3.23%	4.96%	0.80%	3.80%	3.80%
Italy Government 10-year	EUR	4.66%	4.77%	5.51%	2.18%	4.90%	4.90%
US Treasury 3-year	USD	4.75%	2.75%	4.60%	1.64%	3.00%	3.00%
US Treasury 10-year	USD	4.56%	2.91%	4.96%	2.27%	3.30%	3.30%
EM Ext. Gov. (spread in bps)	USD	346	355		324	365	350
Euro IG Corp. (spread in bps)	EUR	159	176		121	165	155
Euro HY (spread in bps)	EUR	469	481		401	465	450
US IG Corp. (spread in bps)	USD	127	161		131	155	145
US HY (spread in bps)	USD	425	464		444	460	450

*as of 11/10/2023

**weighted average (Govies: 50% regression, 40% forward, 10% LT average, EM: 50% regression, 50% LT av., Corps: 80% regression, 20% LT average)

Defaults take their toll. In a higher yield environment, refinancing difficulties will continue to have a negative impact on total returns. Defaults in both EM and HY credit will remain above their historical averages. In Credit, we see higher default rates than history as the indebted public sector will have less room to support the private sector (zombies). For EM sovereigns, we lowered our default projections, but still expect them to be high by historical standards. Only the most fragile EMs will be affected; high interest rates will continue to close the doors to the primary market, but international institutions have introduced new facilities to fill the funding gap.

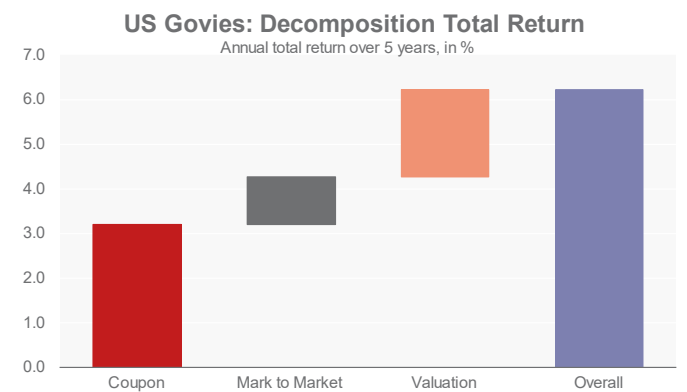
3.1.1 Government bonds

Following a respite at the turn of the year, bond yields across all markets have increased further in 2023, continuing a move initiated in summer 2020 and reaching levels that we deem hardly sustainable in the medium term.

Surely, the rise has fundamental grounds, and we are raising our 5-year government bond yield forecasts by 40-60 bps from last year. This is mainly due to the expectation of somewhat higher key rates in the medium term and a slight increase in the term premium. In particular, the forwards, which are an input (small weight) in our forecast, have increased

significantly over the past 12 months (e.g., the forwards for US yields over a 5-year horizon are more than 130 bps above last year's level). Our forecast adjustment is much smaller and yield projections remain well below current market levels and forwards (e.g., 10-year US Treasury yield forecast 160 bps below current forwards).

Higher coupons and the prospect of lower yields brighten the outlook for government bonds



Source: Bloomberg, Datastream, GIAM

The more generous yields to maturity imply that, despite the yield forecast revision, the return outlook has brightened for government bond investors. In terms of ranking, US Treasuries are the undisputed frontrunner. In local currency, US government bonds are expected to yield over 6% p.a. Even considering hedging costs, they yield significantly more than EA government bonds. Especially, the income component (higher coupons) has increased compared to the previous year.

Italian government bonds rank second, in the Developed Market universe. However, compared to 2022, the return expectations have only increased slightly, as we foresee a larger BTP/Bund spread than a year ago (more negative valuation component). Given the low growth environment and the sharp increase in real BTP yields (10-year up from negative in 2021 to now above 2.50%), Italy's debt sustainability may come into focus in the coming years. For the above base scenario calculations, however, we do not assume a downgrade to non-investment grade nor any other adverse scenario.

German government bonds rank lowest again. However, compared to 2022, return expectations have increased by more than 1 pp to 3.3%. This means that the gap to other EA government bonds has narrowed and from a risk perspective, Bunds are an attractive alternative again. Yet, despite the

duration risk involved, their returns rank at par with our expected returns for Cash.

Overall, the rise in yields has made investment in government bonds more appealing. Investors will likely achieve positive returns over 5 years, both in nominal and real terms.

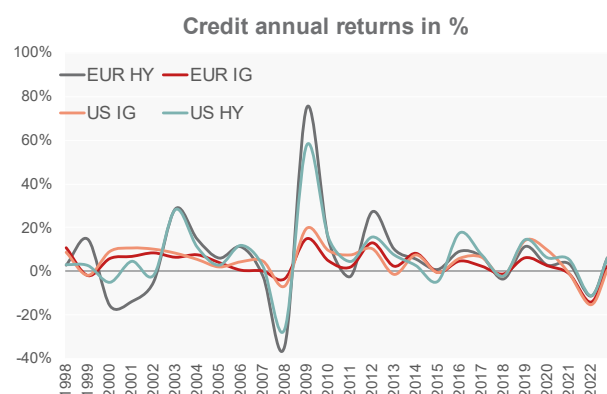
3.1.2 Credit: still attractive given the high carry

Credit spreads widened very rapidly in 2022 amid higher inflation and the limited ability of central banks to buy bonds. The total return performance of IG credit was the most negative on record in both the US and Europe. Spreads have tightened moderately in 2023 as the economic landscape, especially in the US, has proved resilient, implying decent credit performance so far, led by HY in both regions.

Compared to a year ago, we are modestly increasing our return forecasts for all segments of the credit market. All total return components have improved compared to 2022:

1/ Underlying yield contribution is positive as mentioned in the previous section. 2/ Valuations remain positive this year, as both our fair value models and the 10Y moving average point to moderately tighter spreads. 3/ The carry is somewhat higher than in 2022.

We keep the return adjustments for defaults unchanged compared to last year. According to Moody's, 12-month defaults are currently running just over 3% in Europe and over 4% in the US, close to the long-term averages. We see upside, given our cautious economic expectations. Over the past decade, US defaults have been higher than European defaults because of a different bankruptcy regime; also, public sector



support during the Covid was transferred directly to individuals rather than companies. The unconditional support that European governments provided to the private corporate sector during Covid to prevent economic destruction will not be as generous in the future as 1/ public debt has already increased in recent years 2/ central banks cannot buy bonds on a

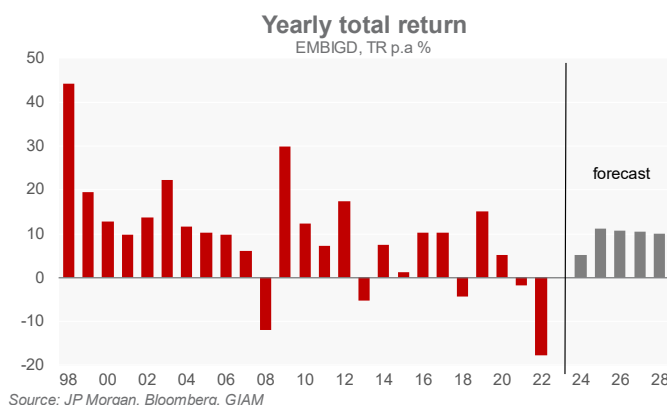
sustained basis in a high inflation environment 3/ markets are very vigilant on fiscal developments 4/ there is an important wall of maturities over the next three years, which implies increased liquidity risk. We therefore maintain our default adjustments, which reflect an average annual default rate among HY of 4% in both regions.

Defaults will be higher than the long-term average, but net returns are still attractive relative to equities.

Hence our 5Y TR expectations for credit are relatively close to last year's forecasts with IG above 4% in Europe and above 5% in the US while we expect HY to deliver more than 7% total return over the next 5Y in both regions.

3.1.3 EM sovereign bonds: bright outlook despite tight valuations

2022 was the worst year of the last quarter century (see chart); as we go to press, 2023 is marginally in the red. We maintain our positive medium-term outlook for EM USD



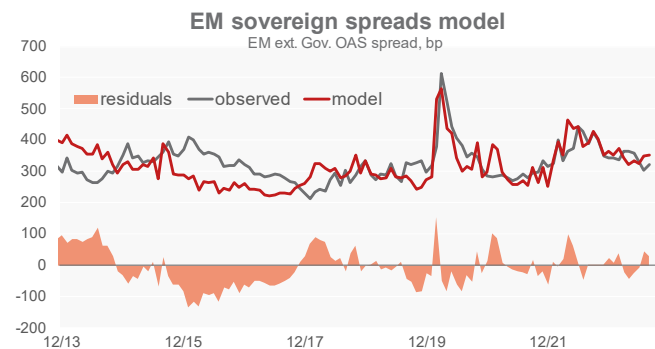
bonds, with a 5Y return of close to 8.8% p.a. (in USD). This return forecast is slightly lower than our forecast a year ago of ~10% p.a. (in USD), essentially due to a less compelling EM spread backdrop. Indeed, valuations currently look stretched, after a 90bp tightening over the past year and with spreads now close to their long-term average. This return forecast remains historically high, if short of the golden 2003-07 years, when EM benefited from the commodity supercycle, diversification and easy financing conditions.

It's a carry and duration story. Carry and positive duration effects will be the main contributors to the high expected return. First, carry is close to its GFC peak, with the EM USD yield-to-worst at ~8.2%. Carry would provide a large cushion in the event of an upward move in core yields. That said, the heterogeneity within the asset class has become more

pronounced, with single Bs and lower-rated names being the main carry contributors to the index. A significant number of countries are currently in distressed territory. At the other end of the spectrum, the elevated Treasury yields imply that IG countries are offering the highest level of carry since the GFC, despite tight spread valuations. Second, the expected gradual decline in core rates will also provide a big boost to EM returns. The recent sell-off in USD rates provides an attractive point for a long-term investment in our view.

Slight deterioration in credit risk. We maintain our long-term spread forecast of 350bp, which implies a modest spread widening from current levels, hence a small negative contribution to return. This forecast is based on (1) the 10-year average of EM spreads and (2) our new long-term fundamental model based on the 10-year US real yield, oil price (Brent), EM inflation and global risk appetite. The structurally higher level of real yields (compared with the pre-Covid decade) overall adversely affects EM credit risk.

Defaults to keep weighing on return. In a higher interest rate environment, we expect defaults to weigh more than they have historically, at -74bp. The number of EM sovereigns in default has reached historically high levels and primary market access has been closed to B- and lower-rated countries. Interest expenditure (% GDP) should continue to rise due to lagged effects from the past rise in interest rates. For EM fron-



Source: Bloomberg, BofA, GIAM calculations

tier markets, 2024/2025 will see a significant increase in debt maturities (wall), which inflates the risk of defaults. However, the peak in defaults is likely to be behind us. First, the absolute yield will decline as core yields fall. Second, alternative sources of funding have provided support. Ten countries have been approved into the IMF's Resilience and Sustainability Facility (6 more have applied).

3.2 Equities: expecting below norm returns

Since last year's report, the MSCI World index has gained some 15%, with the 12-month forward earnings revised up by around 5% and US 10-year real yields up more than 80 bps. In terms of market multiples (PE, PB, PCF and DY), the major indices have become more expensive: for the S&P 500, from a premium of 16% to 20% (relative to average valuation), for the MSCI EMU, from a discount of -9% to -8%, and likewise for the MSCI EM (from -21% to -11%). In particular, 12-month forward PEs have expanded across the board by an average of 6%. Over the past year, EM equities were able to perform in line, notwithstanding the challenges ultimately affecting China's economy after its reopening. Indeed, they got supported from some improvement in relevant EM metrics: dollar has slightly weakened (-1.7%), while EM yields and EMBI spreads have decreased (-22 bps and -97 bps respectively).

Overall, we see four key drivers behind equities' solid performance (at least up to late July 2023) despite a sharp increase in real yields. First, positive macro sur-prises (notably for US). Second, 12-month forward earnings have increased by 2.7% and 8.3% for the S&P500 and MSCI EMU, respectively. Third, high yield spreads declined by 50 bps and 130 bps in the US and EA accordingly. Fourth, volatility, which was slightly elevated in October 2022 (VIX at 30), has declined by almost 10 points, bringing the annual average in line with history at around 20.

We see downside equity risks for the near term and modest positive returns beyond

Looking ahead, we see further downside risks for equities in the short term. The MSCI world has lost nearly 10% from its late July 2023 peak, and the tailwinds may persist over the coming months: sticky inflation, hawkish central banks, and the looming US slowdown, alongside sluggish growth in the EA, China and global trade. All this will keep a lid on earnings forecasts and stock prices and may cause higher volatility. PEs have been resilient to the surge in real yields and a weak M2 momentum – but this creates a valuation risk. Finally, an Israel war escalation could de-rail markets via lower growth and higher inflation.

In our base scenario 2024 will be the weakest year of the 5-year period, with prospects improving thereafter. Compared with our expectations a year ago, we forecast slightly better average GDP growth for the US over 5 years, and lower for the Eurozone (due to energy hurdles, weaker lending standards and demand for loans etc.) Emerging markets' economic growth will suffer from China's woes, but we assume a financial crisis will be avoided. On average for all indices, our

current forecasts are only slightly lower (-40 bps) than in our Autumn 2022 projections (s. section 3.2.3).

3.2.1 Earnings outlook still muted

Given our macro picture detailed in Chapter 2, we have slightly increased our average earnings growth over the next 5 years for the US (by 50 bps), in line with the improved GDP forecast. The new expected earnings growth of 5.5% p.a. remains conservative, below the historical average of 7.1% since 1987 and 9.5% since 2009. Despite mediocre EA GDP growth, we also up-graded EA earnings growth to 3.5% p.a. (also by 50 bps). This compares to 4.7% since 1987 and 5.2% since 2009. For EMs, we are factoring in woes in the Chinese property sector and reduced expected earnings growth from 4.5% to 4%.

3.2.2 Long-term equity returns: the framework

While long-term returns depend on fundamentals and stock market valuations, they are uncertain and particularly volatile over shorter time horizons.

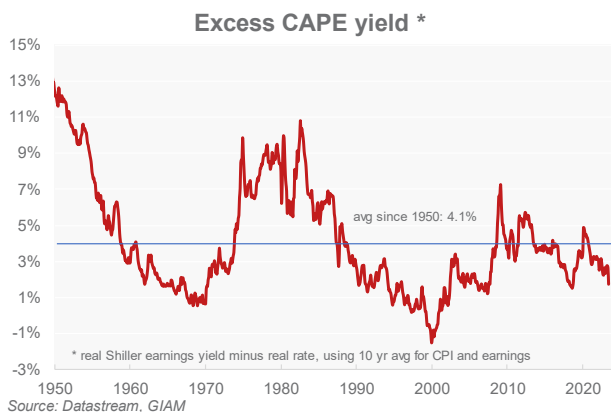
which we assume to correct over the 5-year time horizon. Below we briefly describe the three building blocks of the framework. For more details, please refer to our [original publication](#).

1. The regression-based approach employs our projections of the macro and fixed income variables discussed above to derive estimates of prospective equity returns. Variables used include GDP growth, 10-year government bond yields, EUR/USD and HY spreads. This approach is applied only to the US and the euro area, our core universe. The models' forecasts for the MSCI EMU have fallen slightly, in line with somewhat lower GDP growth expectations and higher forecast yields in the EA (+60bps vs. last year). The models' results for the S&P500 have risen a little, driven by our higher US GDP growth expectations and lower US HY spreads.

2. Our proprietary CAPE-based model uses our expectations for earnings growth, payout ratio (PR), dividend yields (DY), buyback yields, and target CAPEs at the end of the 5-year horizon. Alternatively, we derive total return forecasts making use of modelled fair PEs over the estimation period. These come from our proprietary macro quant models. In the end, long-term returns are decomposed into three components: income (dividend and buyback yields), growth (earnings growth), and valuation (target CAPE).

Indeed, an equity investor gets the stream of cash yields plus the annual price appreciation. We use the US target CAPE expected at the end of 2028 as an anchor and then apply historical valuation gaps relative to the US for other markets. The target for the US CAPE is derived using mean reversion properties and qualitative judgement.

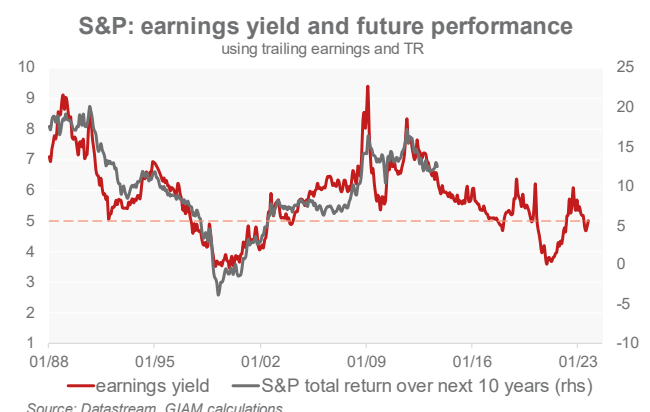
For the EA and EMs, we retain the valuation gap vs. the US based on the analysis of the data since 2007. The final CAPE targets are: 25x (US), 17.5x (EA), and 15x (EMs). They are 1-2pp higher than last year because of lower CPI trends. As our histogram-based analysis of CAPE data for different CPI levels shows, a 26x level for the US would be commensurate with what we had historically since 1987 when inflation stands



To provide a quantitative framework for assessing prospective equity returns, we combine different approaches:

1. a **regression-based approach** employing forecasts for macro variables and other asset classes as an input;
2. a cyclically adjusted price-earnings or **CAPE-based model**, deriving return expectations from adjusted target price earnings ratios (PE) and future earnings growth;
3. a historical assessment of **future returns at CAPE levels** consistent with current ones.

We then adjust the average of these three models by an estimated factor based on risks and under/overvaluation metrics,



between 2% and 3% (our forecast range). That said, we reduced it to 25x taking into consideration lower monetary support (vs history) and higher real yields. For the EA, we applied the historical gap vs the US which is 30%. Higher energy dependence vis-à-vis the US and the associated loss of competitiveness may prove to be a persistent drag, barely offset by some progress towards greater fiscal integration and vigilance on structural reforms.

Applying these CAPE targets and the earnings growth expectations described above, the positive price performance over the past year implies that, with this approach, 5-year projections for all indices covered have decreased on average by 0.5 - 1 pp vs. last year, to 8.2% and 7% respectively for the EA and the US.

3. Historical assessment. We derive future return perspectives from the historical returns observed during periods when CAPE levels were in line with current levels. For all the markets under consideration, the dispersion of 5-year returns is large, and it decreases as the time window extends (e.g. from 5 to 10 years). For this reason, we start with a 10-year window, and, as a precaution, further adjust downwards by a quarter of the historical standard deviation (SD) of the same returns. The result is a projected TR of 6.4% for the MSCI EMU, 5.9% for the S&P500, and 7.6% for the MSCI EM. The results for both the MSCI EMU and the S&P 500 are roughly the same as last year, while they are higher by 0.5pp for the MSCI EM due to lower valuations.

In the final step, we assess the degree of current under-/over-valuation plus specific risks of each market under consideration. The resulting positive or negative adjustment is then attributed equally over the forecast years. This time, we apply a very small negative factor to EA and US (-0.5pp p.a.) to account for expensive energy, lagging innovation and geopolitical risks in the EA, and high valuations in the US. The latter is in part compensated by higher policy flexibility, higher R&D and education spending, AI supremacy, energy

Market	Hist. avg 5-year total return since 1998 (p.a.)	5-year total return projection (p.a.)
World (in \$)*	7.3	5.7
US	9.1	5.3
EA	6.7	5.9
UK**	5.8	6.4
EM (in \$)	6.6	7.5

*derived from the single returns in local currency, taking into consideration the expected depreciation of TW USD

** On valuation grounds, we decided to put the UK projection 0.5% (p.a.) above that of the EA

independence, and more favourable population growth. The adjustment factor for EMs is -0.2 due to Chinese woes.

For EMs, superior total return forecasts result from more appealing valuations as well as higher relative GDP growth and expectations of a weaker US dollar.

3.2.3 Equities: inferior to US Treasuries and HYs

Small cuts in 5-year expected equity returns, vs. last year. The earnings outlook has brightened a bit, but this is largely offset by the more demanding valuation. This makes the outlook for equities subdued from a historical perspective and less attractive from a risk/return perspective.

Small cut in 5-year expected return makes Equity risk/return less attractive

EM equity markets cheaply valued. The final return expectations are presented in the tables above. Overall annual return projections are ~40 bps lower than last year on average

Expected returns (p.a.)	EA	US	EM (in \$)
Regression models (macro- and financial variables)	4.7	4.4	
CAPE-based model	8.2	7.0	7.9
Historical returns coherent to current CAPE levels	6.4	5.9	7.5
<i>Average</i>	6.4	5.8	7.7
Adjustment due to risks & current over-/undervaluation	-0.5	-0.5	-0.2
Final projection	5.9	5.3	7.5

(30 bps for S&P500, 40 bps for EMs and 50 bps for MSCI EMU). We see no ground to change the rankings between the different markets. We expect EMs to have the highest performance over the next 5 years across the markets covered here, primarily owing to a weaker US dollar, much lower CAPE multiples and higher nominal GDP growth. While EMs are exposed to China's woes, we assume an L-shaped recovery for the Chinese economy. Chinese equities in general (and EM overall) would still benefit from significant undervaluation. Geopolitical risks will stay with us, implying downside risks to the forecasts.

Equity risk premia too low? Compared to historical averages (since 1998), our 5-year equity return expectations are nearly half for the US, slightly lower for the EA and somewhat above those for EMs. Equities beat Fixed Income only for the EA, while returning on average slightly less than US

Treasuries as well as US HYs and EM Hard Currency government debt.

3.3 FX: hedge USD exposure

Our exercise here is euro-based assets, but we also consider USD markets and opportunities, which offer both diversification benefits and – thanks to higher US yield levels – the prospect of higher returns in local currency. Yet exposure to FX risk is not negligible, with FX volatility most often exceeding that of higher rated bonds.

Hedging USD FX risk is costly though, currently amounting to around 1.5% p.a. (based on 5y forwards), roughly unchanged from last year. Alternatively, if left open, the return prospects in EUR hinge on the (still bleak) USD outlook. In our summary tables, we show the results for all three dimensions (local, hedged and unhedged in EUR).

We recommended hedging USD exposure in last year's outlook. The almost 8% USD depreciation proved this call very beneficial. It also illustrated how easily FX swings can dwarf return differentials. Looking ahead, we continue to see the benefits of FX hedging prevailing, but the marginal benefit vs. open exposure has shrunk. This is because our 5y EUR/USD target is little changed (1.17 for vs. 1.16 last year), but the starting level is now much higher (1.06 vs. 0.97 a year ago). This implies an annual USD depreciation of 1.9% (see table). Conversely, fully hedging the exposure via FX swaps incurs annual hedging costs of about 1.5%. While the expected net benefit from hedging vs. open exposure of 0.4% is small, it also eschews large valuation risks from FX volatility.

5y projections EUR/USD

	Forecast	Weight
Fair value projection (regression)	1.176	30%
PPP model	1.227	70%
Weighted avg	1.212	
Projection after qual. adj.	1.170	
Current (11/10/2023)	1.062	
Spot return USD p.a.	-1.9%	
Forwards	1.147	
Implied carry p.a.	1.54%	
Total return p.a.*	-0.4%	

Source: Datastream, GIAM calculations; * spot return + carry

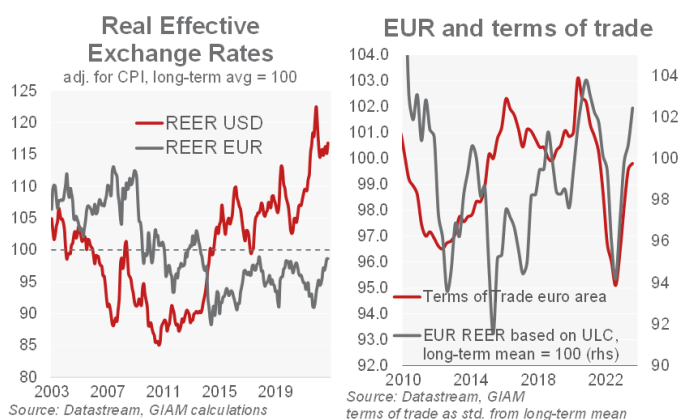
How do we infer our EUR/USD target? Like in our previous 5-year return reports, we start with two quantitative approaches: (a) a mean-reversion framework based on **purchasing**

¹ We also provide forecast EUR/GBP for UK equity exposure. The PPP model (applying a 5-year half-life time to the gap vs current) renders 0.977 in 5 years, consistent with the ~3% overvaluation of GBP REER identified by the IMF for 2022 (likely to have grown after another 3%

power parity (PPP) and (b) projections based on a financial market **fair-value model**. We then add a qualitative adjustment to the weighted average of these approaches. Finally, we add the forward-implied carry (the reverse of the hedging costs) to arrive at the expected benefit (+) or disadvantage (-) of leaving USD open vs. a hedged exposure.

For (a), we employ OECD PPP values for the EUR/USD in 2022 and project its evolution by 2028. Based on a blend of inflation projections and history, we assume CPI inflation in the US to exceed the EA by 0.3pp. This projects PPP at 1.41 in 2028. Assuming a mean reversion towards PPP with a half-life of four years, this implies a spot rate slightly below 1.23 by 2028. This is substantially higher than last year's estimate of 1.14, mostly due to the higher starting point.

For (b), we use a EUR/USD regression model based on 10y US and Bund yields, EMU risk (spreads on Southern Europe government bonds), overall risk sentiment (proxied by the S&P500), and the oil price. It explains 66% of historical EUR/USD variation. The model points to a substantial undervaluation of the EUR/USD of 13% over the pandemic. Given the higher uncertainty and decreased fit of the model, we assume this gap to close by only two-thirds over the 5 years considered. There is also some upside in the projected fair value (mostly from a closing transatlantic yield gap and rising equities). Combined, these factors imply a projected fair value of close to 1.18, lower than in last year's update (1.24).



The weighted average of the two approaches (attaching 30% to the fair value model and 70% to the PPP approach) renders a quantitative target of 1.218, somewhat higher than last year's gauge.¹

Other metrics point to USD richness. Alternative approaches support the tendency of a further EUR/USD

appreciation). We employ a target of 0.96 (curtailing the EUR rebound also vs. GBP). This implies a 2.1% annual GBP depreciation vs. hedging costs of 1.5% p.a.).

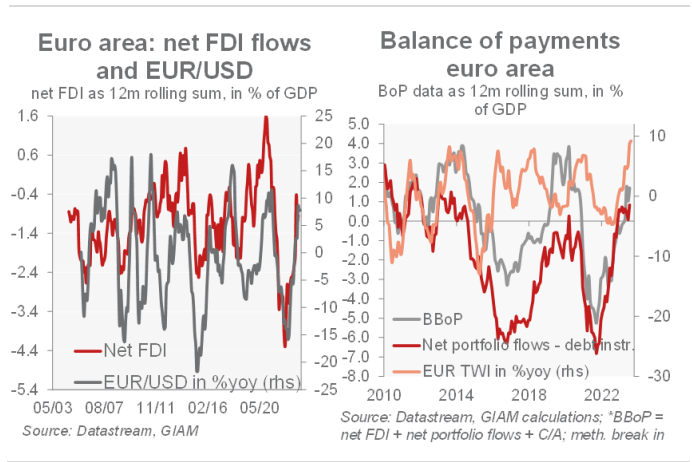
rebound on valuation grounds over the longer term. Currently lofty USD valuation is confirmed by its real-effective value which exceeds the long-term norm by 17% (left chart above). Following its recovery over the past twelve months, the real effective EUR no longer appears cheap.

FX hedging renders marginally higher expected returns over open USD exposure

Similarly, this year's [IMF External Sector Report](#) gauges a mid-point overvaluation for 2022 of about 9% (with the year-to-date USD REER average only mildly weaker than 2022). The Report deems the EUR broadly aligned fundamentally for 2022, but the ~4% appreciation since then points to a moderate overvaluation on IMF metrics. Overall, this still supports the case for a EUR/USD recovery on fundamental grounds, even if to a lesser extent than last year.

The USD is also set to suffer from further reserves diversification, as incentives for several EMs to cut USD exposure have risen on financial sanctions imposed on Russia since its invasion of Ukraine, even though we caution against overstating this factor of USD weakness.

What triggers for a EUR/USD rebound? A big chunk of the correction may happen once global uncertainties ease and global growth starts to recover more visibly, denting demand for the anticyclical USD. The EUR will struggle to gain traction until alternative sources of energy supply are installed replacing Russian gas and oil (both via new LNG import facilities and much higher provision of renewables). This would also help to reverse the immense terms of trade shock burdening the EUR more lastingly (right chart above).



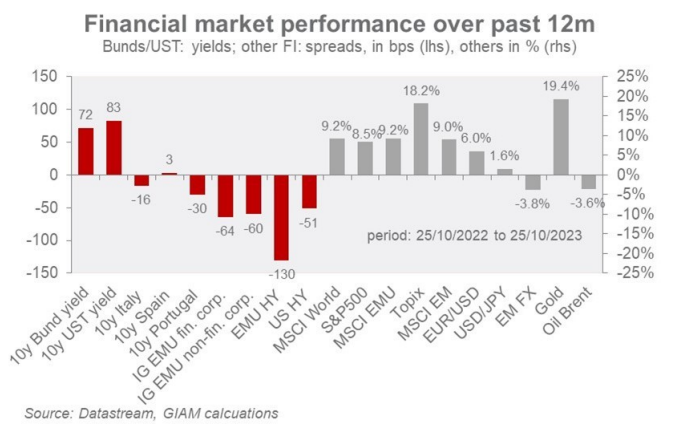
That said, in our qualitative overlay, we favour a lower EUR/USD forecast than implied by the pure quantitative approaches. We are increasingly concerned that the damage from the Ukraine war and the cut of trade ties with Russia (notably energy supply) may burden the euro area structurally

for longer as it cements the competitive disadvantage of high energy costs. The US IRA program, hugely subsidising green investment in the US, does not help either. Furthermore, due to its strong exposure to China, Europe looks more vulnerable to a further fragmentation of global trade links. Against this backdrop, capital inflows into Europe may remain lukewarm. Net FDI has recovered from the double blow of the pandemic and Russia's invasion of Ukraine but will struggle to gain traction (left chart above), while portfolio inflows – following the boost from the end of ECB's negative rates – may face some headwinds from a looming policy normalisation by the BoJ (right chart). It is mostly these considerations that make us adjust the 5-year EUR/USD target implied by the pure quantitative models lower to 1.17, implying a 1.9% annual USD depreciation.

The bottom-line is that hedging USD exposure should still pay off, even if this dents returns by 1.5% p.a. It also helps to reduce portfolio volatility from swings in the exchange rate.

4. Conclusion: The power of yield

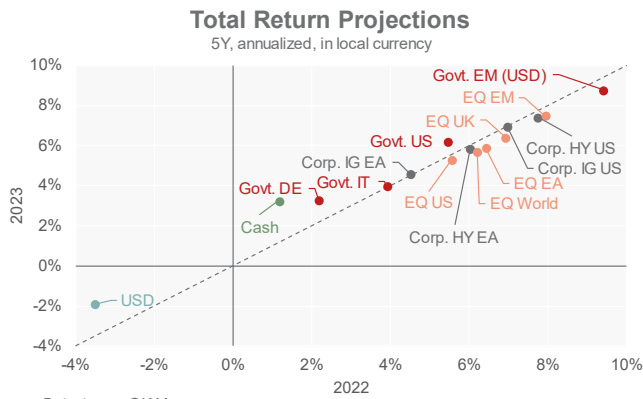
Our 5-year returns update last year revealed a tremendous rise in the appeal of fixed income, thanks to the sharp rise in yields. Core yields have advanced even further since late Oct. 2022 (10y UST yields up about 80bp, see chart below), while yields to worst in Corporate Credit have proven more stable (HY even down) as risk premia have compressed. Equities have rebounded about 9% for most advanced markets.



The even **higher carry for core bonds** and the only slightly upgraded targets for equilibrium yields by the end of the 5-year horizon have lifted their prospects further (see chart below, with dots above the 45° line marking higher returns vs. last year's expectations).

Most strikingly, the outlook of higher for longer central bank rates have pushed up the **expected returns on Cash** to

3.2%, ranking it at par with our return expectations for 10-year Bunds, without incurring any duration risk. The return outlook for 10y USTs looks still more appealing among safe assets, with 6.2% expected in local (USD) terms and 4.6% hedged in EUR. This extra return hinges on our expectations of markedly lower UST yields on the back of deeper Fed rate cuts.



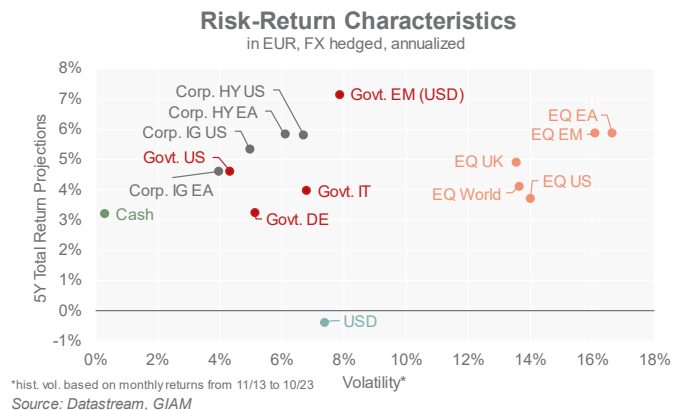
Source: Datastream, GIAM

Within the fixed income space, our risk-return graph shows rising risk (volatility) is rewarded decently for the universe of Cash, Credit and EM debt. US Treasuries rank on par with IG EUR Corporates. While these expose similar risk in terms of volatility, **US Treasuries clearly benefit from a much higher rating**. Italian BTPs render 3.9% in total returns, but do **not look particularly attractive against Credit** (though LDI investors may appreciate the lower capital costs of sovereign debt).

Expected **returns on equities are only slightly lower** vs. last year's exercise. The 5-year earnings outlook has brightened compared to a year ago due to both higher real growth and inflation expectations; but this upside is largely offset by the solid equity gains seen over the past twelve months (notwithstanding the drawdown since end July 2023). This renders an only **limited appeal of Equities** both vs. historical returns and in risk/returns perspectives (risk/return chart below).

It paid off to hedge USD exposure over the past 12 months, with the greenback down 8%. With the EUR/USD target of 1.17 little changed, this implies a much smaller USD depreciation than pencilled in last year. Still, it **should pay off to hedge USD exposure**, with the hedging costs of 1.5% p.a. lower than the predicted 1.9% annual USD depreciation.

Among the risks to our base assumptions, high(er) yields for long and cracks in the financial plumbing rank highest



*hist. vol. based on monthly returns from 11/13 to 10/23
Source: Datastream, GIAM

Major risks to our projections. Among a plethora of risks, two topics stand out. First, yields may stay high(er) for longer on stubborn inflation expectations, lavish central banks or renewed stagflationary shocks (e.g., from a full-blown war in the Middle East). Second, cracks in the financial plumbing could send economies in a deeper recession or – worse – an outright financial crisis.

1. High yields for longer. The disinflationary process is well under way, with inflation rates in the euro area and US already having halved from their peak rates. Yet the last miles towards central banks targets may prove much harder owing to

Total Return Projections (5Y, annualized)

Asset Class	Currency	Local	EUR (FX hedged)	EUR (unhedged)
Cash	EUR	3.2%	3.2%	3.2%
Govt. DE	EUR	3.3%	3.3%	3.3%
Govt. IT	EUR	4.0%	4.0%	4.0%
Govt. US	USD	6.2%	4.6%	4.2%
Govt. EM (USD)	USD	8.8%	7.2%	6.7%
Corp. IG EA	EUR	4.6%	4.6%	4.6%
Corp. HY EA	EUR	5.8%	5.8%	5.8%
Corp. IG US	USD	6.9%	5.4%	4.9%
Corp. HY US	USD	7.4%	5.8%	5.4%
EQ World	USD	5.7%	4.1%	3.7%
EQ US	USD	5.3%	3.7%	3.3%
EQ EA	EUR	5.9%	5.9%	5.9%
EQ UK	GBP	6.4%	4.9%	4.2%
EQ EM	USD	7.5%	5.9%	5.4%
		Spot	Carry	Total
USD		-1.9%	1.5%	-0.4%

tight labour markets inducing elevated wage pressures and entrenched inflation expectations. This setting may be exacerbated by a renewed stagflationary shock from geopolitical tensions, including an escalating war in the Middle East curbing oil supply, a renewed broadening of the war in Ukraine or a China/Taiwan tensions disrupting global supply chains.

This would require central banks to push rates even higher or – if they fail to respond promptly – markets to price a higher term premium on bonds. Peripheral bonds in Europe may suffer more visibly in such a scenario as worries about a rising interest burden and debt sustainability would mount. Inflation linkers and to some degree energy commodities would offer some protection.

2. Cracks in the financial system. The financial system has so far weathered the fastest rise in rates since the 1980s remarkably well. The collapse of SVB in the US and Credit Suisse in Europe, however, have been a healthy reminder that the risk of accidents is rising amid such drastic policy moves. Commercial Real Estate and the shadow banking sector look particularly vulnerable. While central banks may swiftly open the liquidity taps, in a stress scenario, persistent

price pressures and elevated public debt levels constrain a broader policy response much more than in the past. Equities and speculative corporate bonds would suffer severely, while US Treasuries and the US dollar would offer protection as safe havens.

While we see these adverse risks ranking highest, we should not dismiss the (more muted) chance of a much brighter future. In a **Goldilocks scenario**, the Fed may succeed in engineering a soft landing. An end of Russia's war in Ukraine and easing political tensions (both China/US and in the Middle East) may slow global fragmentation and ease energy prices, helping inflation to fall back to normal much faster and central banks to cut rates faster. This would be bullish for Equities and HY Credit.

 **Imprint**

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