

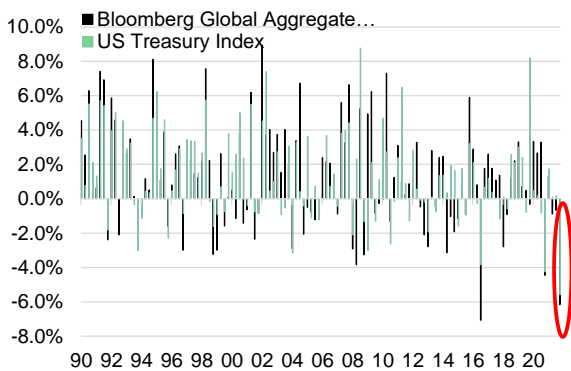
# Monthly Market Musings: Bonds under pressure

- We take a closer look at the drivers of the historical large sell-off in bonds.
- A lot of policy tightening is now priced in but there still substantial risks to the outlook for bonds.
- We discuss the significance of an inverted US yield curve for recession risk and equities.

## Historically poor quarter for bonds

Sovereign bonds underperformed significantly in March, capping off an historically poor quarter for returns. For the Bloomberg US Treasury (-5.6%) and AusBond Composite Bond (-5.9%) indices, Q1 2022 was the worst quarterly outcome in over 30 years. It was the second worst quarter for the broader Bloomberg Global Aggregate Index (-6.2%).

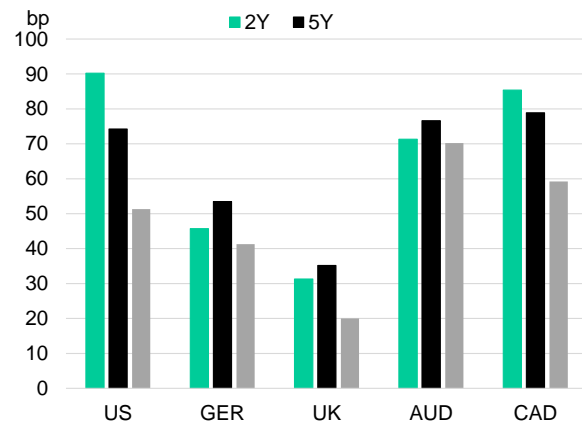
Chart 1: Bond index quarterly returns



Source: Ardea,

Bond yields surged higher, led by the US market, as central banks reacted to the relentless rise in inflation. Shorter-dated bonds led the sell-off, as markets priced for both a faster pace of tightening and higher terminal policy rate in the next cycle. The rise in yields has extended further in early April. Central banks and investors are grappling with headline inflation running at a 40 year high in the US (+7.9%) and in Europe (+7.5%) at the highest level in the history of the single currency.

Chart 2: March monthly Change in sovereign bond yields



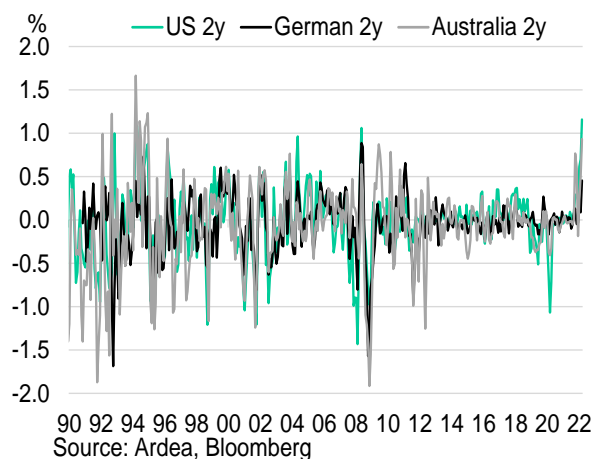
Source: Ardea, Bloomberg

As outlined in last month's [note](#), the Russia invasion of Ukraine had driven risk-off moves across markets and higher commodity prices. While geopolitical risks remain in focus for investors and commodities are still volatile and elevated, equities have recovered in recent weeks.

## Rates repricing – throwing away the post-2008 rulebook

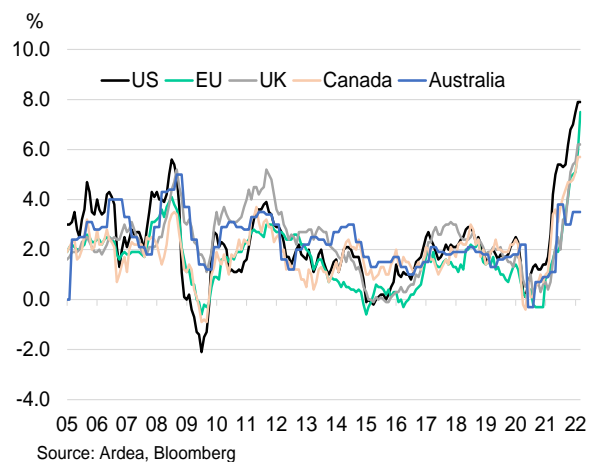
The shift higher in rates over the last few months has been front-end led. Building on earlier moves, 2y yields have seen among the largest 3 month increases since the 1990s in the US, Germany and Australia (Chart 3).

Chart 3: 3m change in 2y yields



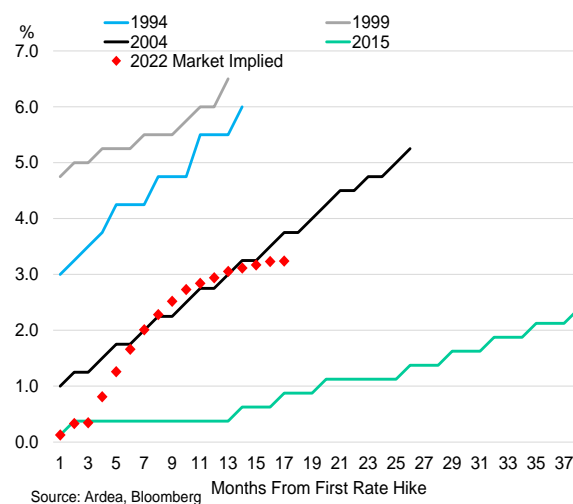
The extension of the rise in yields in March and April follows three main developments: 1) Global inflation continuing to rise (Chart 4); 2) The Fed openly flagging 50bp rate hikes at successive meetings; 3) The Fed outlining a faster plan for Quantitative Tightening (QT).

Chart 4: Headline CPI



After delivering the first 25bp hike of the cycle in March, the Fed has signaled a willingness to hike in 50bp increments at upcoming meetings. The front end of the US curve is now priced for a peak in the Fed Funds rate of over 3% within just over a year. As Chart 5 shows, this pricing implies a far more aggressive tightening cycle than in 2015-18 and would take the key policy rate back to levels unseen since prior to 2008.

Chart 5: Prior Fed Funds tightening cycles and current market pricing - 1<sup>st</sup> hike to peak

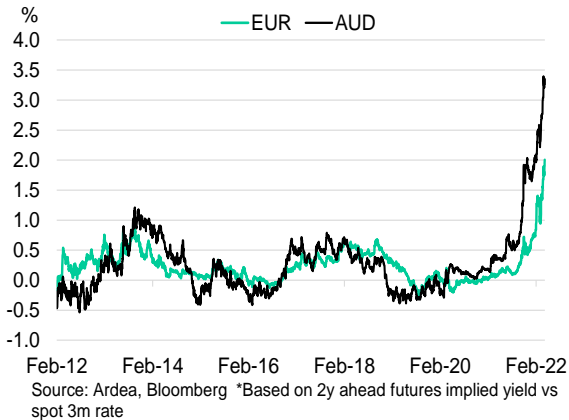


Other markets are similarly pricing policy rates to be raised quicker and to a higher level than at anytime since prior to 2008. The Bank of Canada, like the Fed, is expected to hike in 50bp increments. The Bank of England – having already raised rates 65bp since December 2021 – is priced to take the base rate to 2.5% over the next year.

Even central banks previously determined to be well behind the Fed in tightening are now expressing more hawkish intent. This is notable for the ECB - expected to start lifting rates later this year (as discussed in our last note). Similarly in early April, the RBA opened the door to commence lifting rates sooner (Chart 6).

Only the Bank of Japan stands out in strongly defending its yield curve control policy in recent weeks as the global bond sell-off spilled over into the JGB market.

Chart 6: 2y ahead rate priced for EUR and AUD



Beyond rate hikes, central banks are also signaling a reduction in balance sheet size. The Fed's March minutes revealed plans to cap the size of the monthly runoff of bonds from the portfolio at \$95bn (\$60bn UST and \$35bn MBS) after a brief phase in period. This planned reduction in balance sheet size – or Quantitative Tightening (QT) – is around twice the pace seen in the last cycle. However, given the massive size of post-Covid QE, the faster run-off would still see the Fed's asset holdings at pre-pandemic levels at the end of 2024.

QT is a passive process, so the impact on bond yields should be less dramatic than QE. As discussed in prior [notes](#), there are implications for term risk premia and the shape of yield curves, but this also depends on the net flow of bonds (after adjusting for issuance). QT is still another bearish headwind for the market and over the last few weeks has added steepening pressure to the curve.

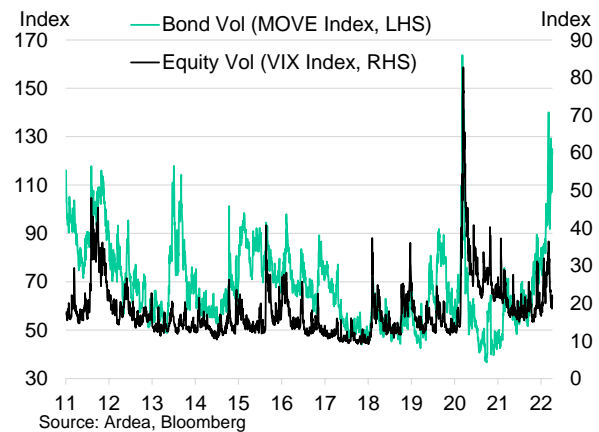
### Is the worst over for bonds?

After such a big repricing in a short space of time, bonds could soon start to consolidate. However, we may not yet have seen the peak in yield levels – typically this has occurred well into tightening cycles.

Also, unlike other bond sell-offs over the last decade, investors and central banks do not have confidence that inflation risks are contained.

Yields could make new highs until inflation data turns lower or tighter financial conditions meaningfully weigh on growth (a risk starting to be factored into longer run rates with yield curves flat and recently inverting). In addition, real yields are still historically low and bond volatility is high (Chart 7).

Chart 7: Option implied volatility in bonds and equities



### Implications of an inverse yield curve

In a [note](#) earlier this year, we flagged increased investor focus on yield curve shape and the implications for recession risk from multi-asset investors as rate hikes neared. We also highlighted Fed research which focuses on the 3m vs 10y curve to quantify recession probabilities. This spread is still steep enough to not raise recession alarms, but naturally lags the 2s10s curve, which briefly traded inverse in late March before rebounding slightly over the last few weeks (following earlier inversions in other points, such as 7s10s).

At the time of writing, the spot US 2s10s curve is +28bp, after inverting briefly in late March. The one year forward 2s10s curve is -27bp, implying the market is still priced for eventual inversion (for more background on forward rates and yield curves, see [here](#)).

An inverted 2s10s curve typically raises three questions for investors:

## 1) Why is the yield curve inverted?

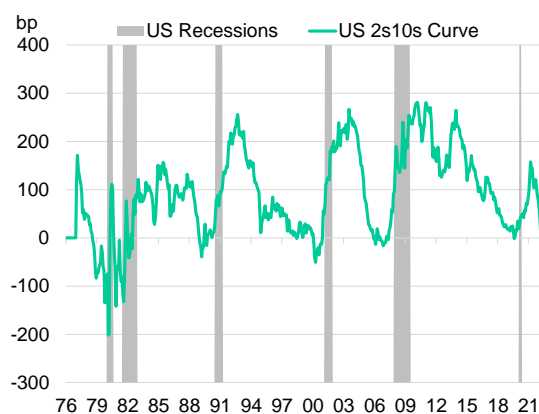
An inverted broad yield curve spread, such as 2y vs 10y, usually suggests that after a period of hiking rates, a central bank is expected to cut rates again as growth slows. The market is pricing aggressive rate hikes for the US (and many other markets) over the next year, before rate cuts over the following few years (which are often associated with recessions).

However, policy rate expectations are only part of the story. Yield curve shapes are driven by many other variables, such as demand for long dated bonds from liability-driven investors and central bank QE programs. Yield curve shape can therefore be subject to a lot of noise.

## 2) How well has an inverted curve predicted recessions historically?

The majority of US recessions over the last 70 years have followed an inversion of the 2s10s curve. However, the lags between inversion and recessions have varied significantly around the average timeframe of about 18 months. Chart 8 shows the relationship between US recessions and the 2s10s curve since the 1970s.

Chart 8: US 2s10s curve and recessions



Source: Ardea, NY Fed, NBER,

The yield curve is just one of a wide range of macro and financial indicators that could foreshadow a recession. But the curve has historically been seen as reliable and simple and so is widely followed as an indicator. Some other

more detailed recession models also suggest increased risk of recession – just over 60% in the coming 2 years if inflation stays high according to a [recent paper](#) by Harvard researchers using a more sophisticated model. A link with the simpler curve analysis is that higher inflation increases the risk of the Fed overtightening and slowing growth.

A recession is by no means assured just because of the historical relationship with curve inversions. Last month, the Fed expressed confidence the economy can make a “soft landing”, which avoids a recession and high unemployment. Chair Powell cited 1965, 1984 and 1994 as examples of soft landings.

Investors are understandably doubtful of the soft landing view in the wake of high inflation that weighs on real incomes. Indeed, most long-range economic forecasts should be viewed with scepticism at a time of such extreme macro volatility. As we discussed in our [2022 key themes](#) note in December, ongoing high macro uncertainty has implications for fixed income relative value through distortions in yield curve shape.

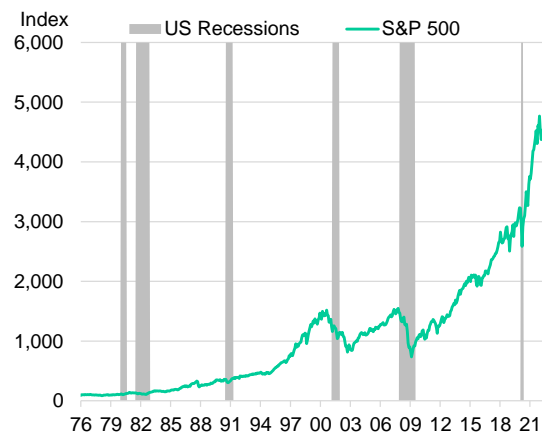
## 3) What are the implications for other asset classes?

While many investors are focused on the inversion of the yield curve as foreshadowing recession risk, not all asset classes appear as concerned. Credit spreads - based on major CDS indices - are off late 2021 levels - but are still well under levels that prevailed in previous recessions and periods of market stress. Equities are below end 2021 peaks but have bounced back from March lows.

As Chart 9 shows, equity bull markets have historically ended when the business cycle is close to rolling over – within the space of a few months rather than the 1-2 years implied by yield curves. Indeed, some analysts point to the

tendency for equities to deliver positive returns in the one year immediately after an inversion. The major correction (ignoring sector shifts) has only tended to occur when hard economic data starts to turn. In addition, many investors still see the low real yields and distance to genuinely restrictive rate hike territory as supporting the case to remain pro-risk in allocations for now.

Chart 9: S&P 500 and US recessions



Source: Ardea, Bloomberg, NBER

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