

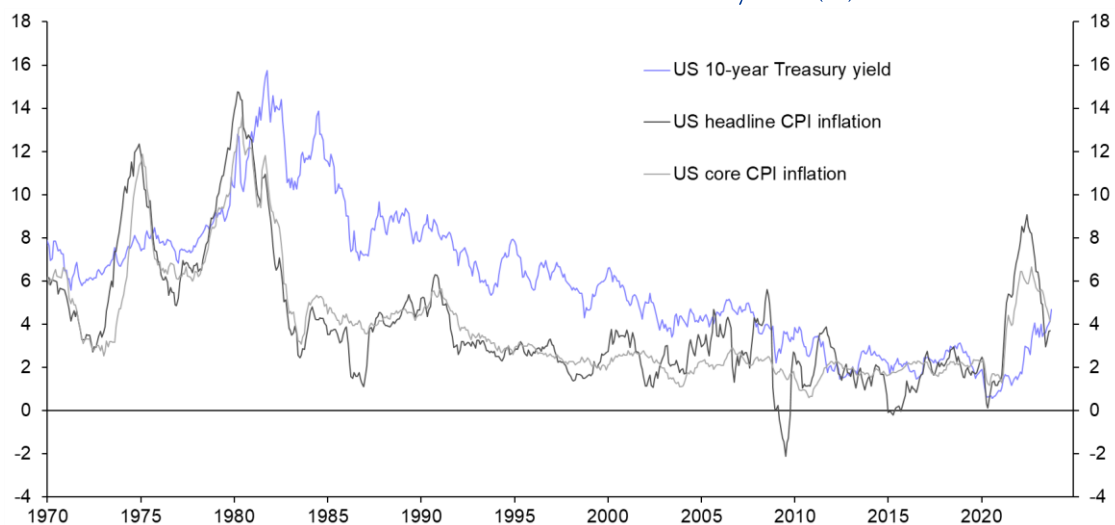


# GLOBAL MARKETS FOCUS

## Will falling inflation ultimately push US Treasury yields down?

- Although Treasury yields have fallen back in recent days, the big picture is that they are still much higher than they were when headline and core inflation peaked more than a year ago in the US. In this *Focus*, we examine the role of inflation in the sell-off in Treasuries. Our conclusion is that yields will probably drop further but settle at a much higher level than before the pandemic.
- Concerns about inflation have been a key cause of the bond sell-off over the past couple of years. But inflation seems to have peaked, and yet Treasury yields have kept on rising. Indeed, about half of the rise in the 10-year Treasury yield from its post-pandemic low has occurred *after* the peak in annual CPI inflation. This is unusual, as falling inflation has typically been accompanied by lower Treasury yields. (See Chart 1.)
- One reason is that long-term inflation expectations never rose as much as headline or core inflation. So there wasn't much room for them to fall back, and push Treasury yields down, after inflation peaked. If anything, long-term inflation expectations seem to have edged *up* even as inflation has come down – at least according to one estimate – although they still aren't particularly high.
- Another is that the compensation required by investors for bearing inflation risk – reflected in inflation risk premia (IRP) – is also estimated to have increased recently and pushed Treasury yields up.
- The third, and arguably most important, reason is that investors now think that monetary policy will need to be much tighter in the future than it was over the past decade in order for inflation to return to target and stay there. The upshot is that real yields have risen a lot, pushing Treasury yields much higher.
- We think that Treasury yields will drop further as inflation continues to decline. While we doubt that inflation expectations or IRP will fall back much, we think that real yields will decrease as the Fed cuts more quickly than investors expect.
- Nonetheless, we think that, on average, US monetary policy will be significantly tighter in the future than it was between the Global Financial Crisis (GFC) and the start of the pandemic, with real and nominal Treasury yields higher than they were then. We forecast that the 10-year Treasury yield will average a bit more than 4% over the next decade, which would compare to an average of about 2.4% during the 2010s.

Chart 1: US CPI Inflation & 10-Year Treasury Yield (%)



Sources: Refinitiv, Capital Economics



# Will falling inflation ultimately push US Treasury yields down?

Treasury yields have continued to rise even though both headline and core inflation peaked more than a year ago in the US. Admittedly, the sell-off in bonds seems to have lost a bit of steam in recent days. But Treasury yields are still not far off their highest levels since before the GFC. In this *Focus*, we examine the role of inflation in the sell-off in Treasuries.

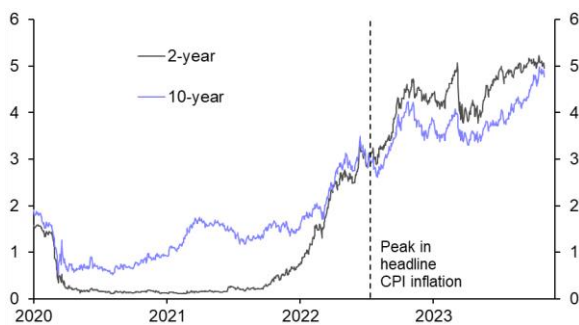
The first section sets the stage. The second argues that both expectations for future inflation and inflation uncertainty have increased, contributing to the bond sell-off. The third section looks at the key role played by real rates, which have increased markedly as central banks have started their fight against inflation. The last section concludes with our forecasts for the 10-year Treasury yield.

## Context

The big sell-off in bonds began almost two years ago. One of its key causes was concern about inflation, triggered by fears about the ultra-loose monetary and fiscal policy put in place around the world after the pandemic; the supply disruptions caused by measures to prevent the spread of COVID-19; the impact of rising energy costs on other prices following Russia’s invasion of Ukraine; and an overheating economy in the US.

Inflation – both headline and core – seems to have peaked more than a year ago in the US. But that hasn’t stopped Treasury yields from rising further. (See Chart 2.)

Chart 2: US Treasury Yields (%)



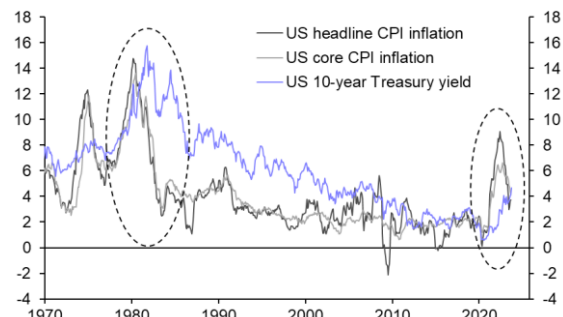
Sources: Refinitiv, Capital Economics

The 2-year Treasury yield has increased by about 500 basis points (bp) since mid-2020, and the 10-year Treasury yield by nearly 450bp. About half of

those rises have happened since the peak in annual inflation.

This is very unusual, as falling inflation has generally been accompanied by lower Treasury yields. (See Chart 3.) One key exception was in the early 1980s, when the Fed kept tightening monetary policy despite the sharp fall in inflation, which led the 10-year Treasury yield to keep rising after inflation peaked. And the 10-year yield remained particularly high relative to inflation for several years.

Chart 3: US CPI Inflation & 10-Year Treasury Yield (%)



Sources: Refinitiv, Capital Economics

To understand this divergence, we work through in the next sections the different ways in which inflation has affected Treasury yields.

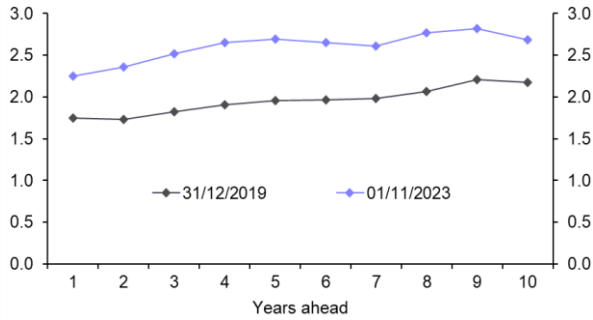
## The rise in inflation expectations

**One reason why Treasury yields have not tracked common inflation measures is that that forward-looking measures of inflation compensation never rose by nearly as much as actual inflation.** The inflation figures that get the most attention – in the case of the US, CPI and PCE inflation – are backward looking. However, when investors decide whether to invest in long-term bonds, like 10-year Treasuries, what they really care about is the path of inflation over the remaining life of these securities.

**This means that forward-looking measures of inflation are more important when thinking about long-term Treasuries.** Since the pandemic, inflation compensation, as measured by inflation swap rates, has risen by 50-75bp across the curve. (See Chart 4.)



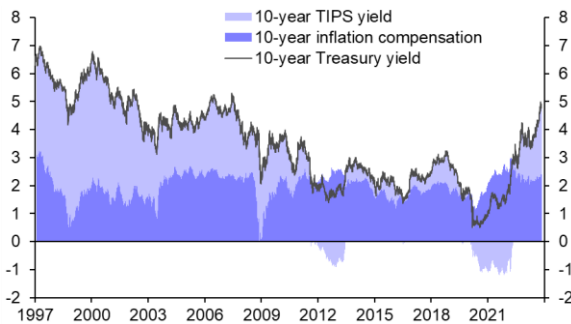
Chart 4: Inflation Swap Rates (%)



Sources: Refinitiv, Capital Economics

Similarly, 10-year breakeven inflation – another measure of inflation compensation calculated as the difference between the yield of 10-year conventional Treasuries and that of 10-year TIPS – has risen a bit since the pandemic. (See Chart 5.)

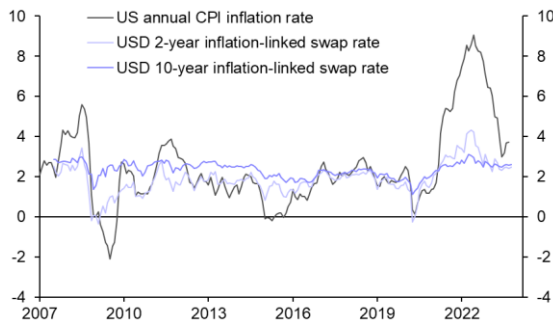
Chart 5: US 10-Year Treasury Yield (%)



Sources: Refinitiv, Capital Economics

But the increase in inflation compensation has been much less dramatic than the rise in headline or core CPI inflation. (See Chart 6.)

Chart 6: US CPI Inflation & USD Inflation-Linked Swap Rate (%)

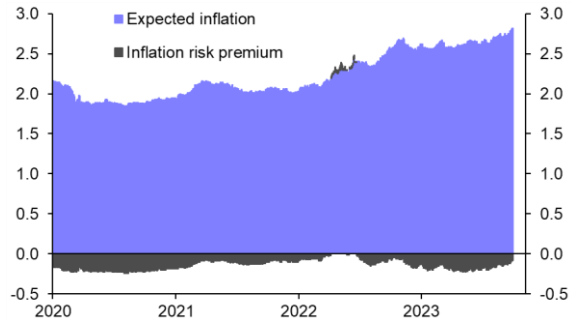


Sources: Refinitiv, Capital Economics

To think through the chances that inflation compensation will drop back, it helps to break it down further into inflation expectations and the inflation risk premium (IRP).

One model that estimates this breakdown, the **DKW/KWW model** created by Fed economists, suggests that expected inflation over the next decade has risen from about 2% right before the COVID-19 pandemic started, to roughly 2.8% at the end of September, the last month for which data are available. (See Chart 7.)

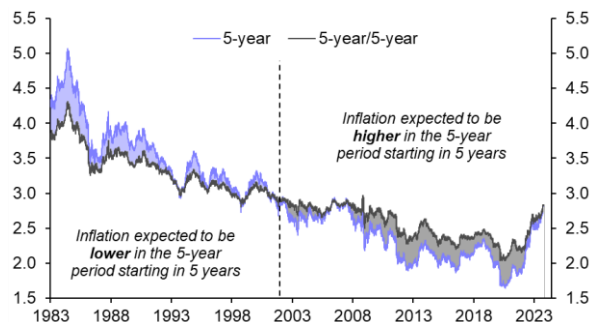
Chart 7: DKW/KWW Model Estimates Of 10-Year Expected Inflation & Inflation Risk Premium (%)



Sources: DKW/KWW, Capital Economics

Indeed, investors now seem to expect inflation to average the same over the next five years as they do over the five years after that (the “five-year/five-year forward” period). That hasn’t been the case since the late 1990s, which suggests to us that investors think that the post-GFC period – when inflation was low but expected to rise – is now over and that risks are more balanced. (See Chart 8.)

Chart 8: DKW/KWW Model Estimates Of US Inflation Expectations (%)



Sources: DKW/KWW, Capital Economics

Overall, it appears that inflation expectations have not risen as much as headline or core inflation because investors always thought that price pressures would abate at some point. But this means that there was not much room for inflation expectations to push Treasury yields down after inflation peaked. In fact, inflation expectations appear to have continued to edge up since then.



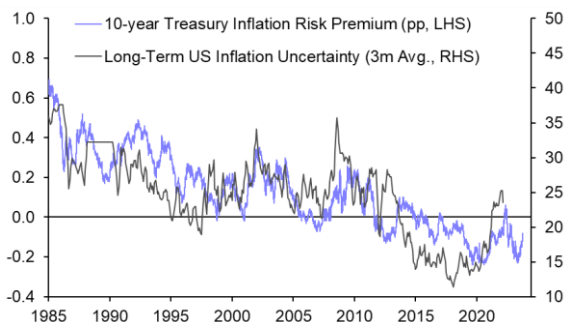
At face value, inflation expectations of 2.8% over the next 10 years don't appear consistent with the Fed's 2% target. However, the Fed targets PCE inflation, which is typically lower than CPI inflation, the measure used in the DKW/KWW model. And, according to that model, expected inflation averaged a bit under 3% for most of the early 2000s, when the Fed was quite successful in hitting its inflation target. So inflation expectations of about 2.8% in the model don't necessarily mean that there is room for them – and long-term yields – to fall.

**Nonetheless, if we are right that price pressures will continue to ease, longer-term inflation expectations could yet fall a little.** We think that **core inflation will fall back to 2% by mid-2024**, with a slowdown in housing services inflation adding to the disinflation already evident in core goods inflation.

**Further ahead, a key question will be whether and where inflation will eventually settle in the post-pandemic world. We expect that inflation will become more volatile in the long run, with risks skewed towards the upside.** Indeed, we suspect that inflationary supply shocks will become more frequent due to the fracturing of the global economy as well as climate change. This suggests to us that inflation expectations will remain higher during the next decade than they were during the previous one.

**Meanwhile, the DKW/KWW model also gives an estimate of the inflation risk premium, which is generally defined as compensation required by bond holders for bearing inflation risk.** Going by this model, the 10-year IRP has historically tended to track measures of long-term inflation uncertainty, such as the one calculated by economist **Carola Binder** – although that data series stops at the end of 2022. (See Chart 9.)

**Chart 9: US Treasury Inflation Risk Premium & Long-Term US Inflation Uncertainty**

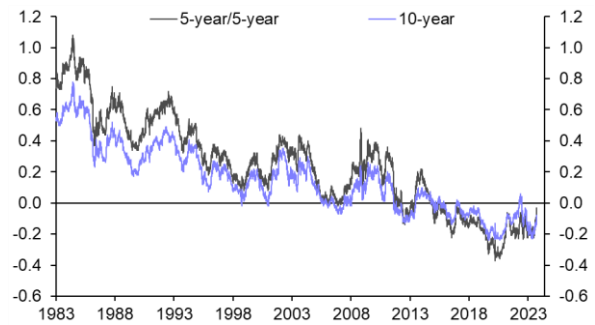


Sources: DKW/KWW, Carola Binder, Capital Economics

Admittedly, estimates suggest that the 10-year IRP has historically had only little bearing on the 10-year Treasury yield, at least compared to expectations for inflation. (See Chart 7 again.) But between the mid-1980s and the pandemic, the IRP of 10-year Treasuries was still on a clear downward trend, falling from roughly 0.6pp to as low as *minus* 0.2pp.

**Since then, however, the 10-year Treasury IRP is estimated to have increased by more than 15bp, and the 5-year/5-year IRP by more than 30bp.** That suggests that the perception of risks towards inflation are now somewhat elevated relative to immediately before the pandemic. (See Chart 10.)

**Chart 10: DKW/KWW Model Estimates Of US Treasury Inflation Risk Premia (%)**



Sources: DKW/KWW, Capital Economics

What's more, these estimates only run to end-September; IRP may have increased further, given the rise in term premia in other models since then.

**Our view that inflation will be more volatile in the future leads us to think that IRP are more likely to rise further than to fall back over the coming years. After all, IRP are still very low by past standards.**

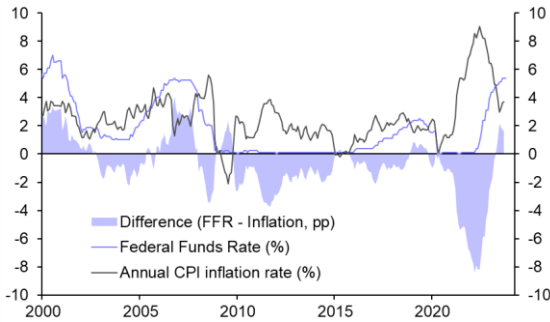
**The rise in real rates**

**Given all that, perhaps it's not surprising that inflation compensation has edged up recently. But most of the rise in long-dated Treasury yields hasn't been because of inflation compensation. Instead, it has been because of an increase in real yields.**

Most central bank rate hikes were, at least initially, much smaller than rises in inflation – this was notably the case in the US. (See Chart 11.) So it might be assumed that real rates haven't risen much.



Chart 11: Federal Funds Rate & US CPI Inflation

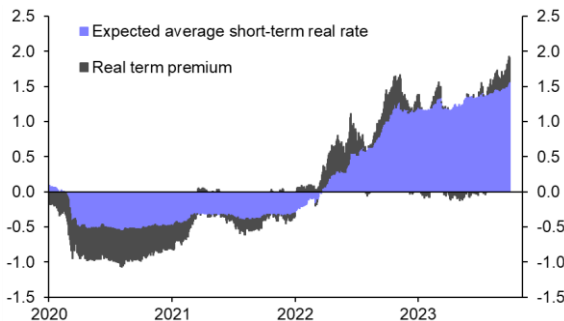


Sources: Refinitiv, Capital Economics

However, as noted in the previous section, inflation expectations have risen by much less than inflation itself, as investors have remained confident that central banks will eventually manage to bring inflation back to target. The flip side is that they expect that this will only be possible with “higher-for-longer” policy rates. So forward-looking measures of real interest rates have increased significantly.

This is notably captured in the rise in the 10-year TIPS yield, from about *minus* 1% when the Fed started hiking rates in March 2022 to roughly 2.5% now. (See Chart 5 again.) Admittedly, that seems to have partly reflected a higher real term premium. But it may also have been due to expectations for a higher real federal funds rate on average. The DKW/KWW model’s estimation of the short-term average real policy rate over the next 10 years, for example, has risen from about 0% to more than 1.5% over that period. (See Chart 12.)

Chart 12: DKW/KWW Model Estimates Of Expected Short-Term Real Rate & Real Term Premium (%)



Sources: Refinitiv, Capital Economics

**We think that real yields will drop back.** This reflects our view that **the Fed will cut rates earlier and more quickly** than currently discounted in the markets, as inflation in the US returns to target and the US economy falters.

**Nonetheless, we suspect that real interest rates will be higher over the next decade than they were between the GFC and the start of the pandemic.** Expected real interest rates were very low until the outbreak of COVID-19 because central banks were struggling to get inflation up and were keeping policy very accommodative. And neutral rates seemed to be quite low as well. But, in our view, that is not the case anymore. We think that **the ‘ultra-low rates’ era is over**, and that that the real equilibrium rate will be higher over the next decade than it was over the past one. And we also anticipate that the real term premium will be higher in the future, notably owing to **concerns about US fiscal policy** and **weaker demand from abroad**.

**Conclusion**

Overall, it appears that higher inflation has pushed Treasury yields up directly – but mildly – via inflation expectations and the inflation risk premium, and indirectly – but much more strongly – via real rate expectations. As inflation falls, it’s possible that these trends will partly reverse.

**We think that Treasury yields will drop further as inflation continues to decline.** While we doubt that inflation expectations or IRP will fall back much, we think that real yields will decrease as the Fed cuts more quickly than investors expect.

**Nonetheless, we think that, on average, US monetary policy will be significantly tighter in the future that it was between the Global Financial Crisis (GFC) and the start of the pandemic, with real and nominal Treasury yields higher than they were then.** We forecast that the 10-year Treasury yield will average a bit more than 4% over the next decade, which would compare to an average of about 2.4% during the 2010s.



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