Santander Private Banking

Fixed-income: Time to add duration to portfolios

25 - 50bp[1]

Additional rate hikes to reach the terminal rate in the main developed countries

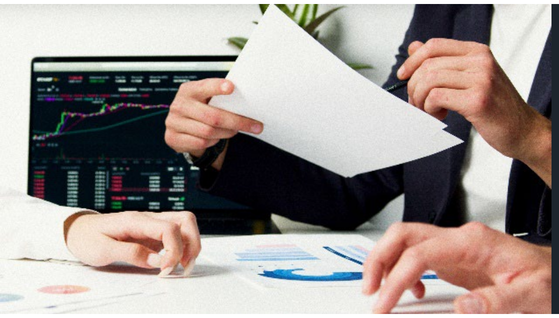
86 -100%[2]

Level reached by central bank interest rate hikes relative to expected terminal rates

2.5% vs. 1%[3]

Change in the price of a 5-year bond vs. change in the price of a 2-year bond in the face of a 50bp decrease in interest rates

[1] Source: Calculations by Santander.
[2] Source: Bloomberg economists' consensus. Survey on 8 March 2023.
[3] Source: Calculations by Santander (see example inside).



Positive real long-term interest rates, expectations of future cuts in benchmark rates, and fixed-income's diversification effect make this a good time to think about adding duration to portfolios.

Positive real interest rates in the medium-long term

The central banks are winning the battle against inflation that they have had to wage over the past 12-18 months, depending on geography. The increase in prices is beginning to tail off as we enter a period of higher interest rates. In the article we published in March: A new yield environment for short-term fixed-income, we discussed the significant change that was occurring in short-term low-risk investment options, where it was possible to find levels of returns that largely mitigated the negative impact of additional interest rate hikes.

Another milestone was reached recently for the first time in a decade in Europe and in the last two years in the United States: not only are nominal interest rates much higher, **but medium-term real interest rates (5 years) are positive.**

The chart on the left is for the Euro area, the one on the right for the United States. In the upper two charts, the red line reflects the yield to maturity of the Bloomberg Aggregate Bond Index and the blue line represents the five-year inflation expected for each geography.

In the **Euro area, although inflation remained very low in the last decade (below even the ECB's 2% target), nominal rates were close to zero or actually negative. Consequently, as shown in the lower left-hand chart, real rates** (nominal rates - expected inflation) **were negative, i.e., they failed to cover inflation for a long period**. The ECB has raised benchmark interest rates by 375bp since July 2022, and this has been reflected across the entire yield curve. Although long-term inflation expectations are now higher (close to 2.5%), so too are the nominal yields offered by term fixed-income (around 3.45%). **In the Euro area, real interest rates are currently around 0.95%.**

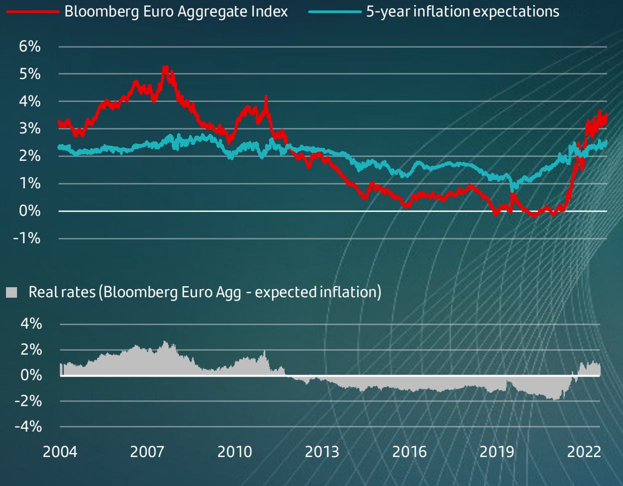
The **United States** is also experiencing the same phenomenon of positive real rates (after a shorter period of negative rates) **over 2%**, since nominal rates are close to 4.6%.

Nominal rates and 5-year inflation expectations

Easing inflation and higher nominal rates lead to positive real interest rates

Euro area

Source: Bloomberg EuroAgg Index and 5-year expectations of inflation in the Euro area (EUR Inflation Swap Forward 5Y5Y). Data as of 02/06/2023.



United States

Source: Bloomberg US Agg Index 5-year expectations of inflation in the United States (USD Inflation Swap Forward 5Y5Y). Data as of 02/06/2023.

The “last mile” of monetary policy

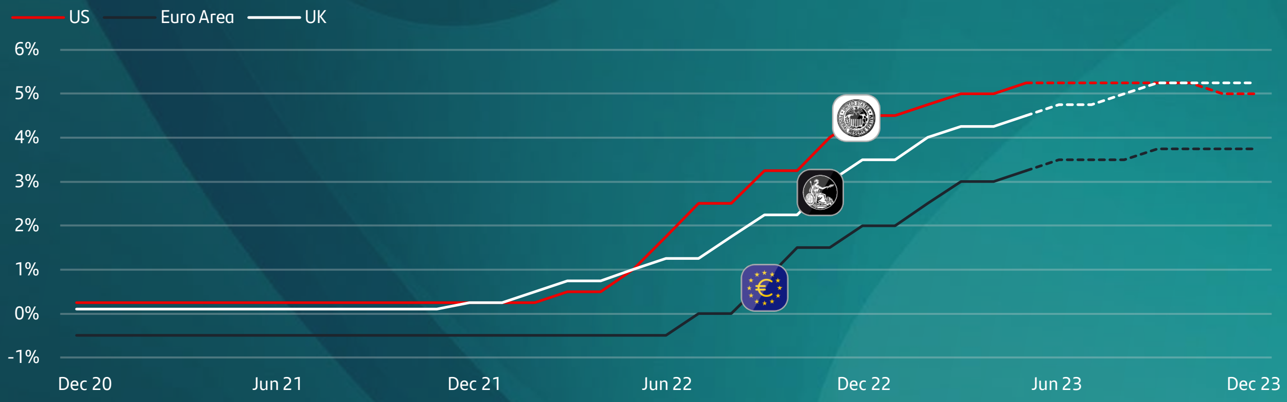
After two years in which monetary policy has become steadily more restrictive, starting (and ending in some cases) much earlier in emerging countries than in developed countries, **we have reached, or are about to reach, the “terminal rate”, the point where interest rates stop rising.**

Referring to the main developed countries, the **Federal Reserve** raised the benchmark rate by 25bp to 5%-5.25% in May.

This **brought the increase in the benchmark rate to 500bp**. Any additional rate hike in the coming months would be marginal. **The Bank of England has raised rates by 425bp** to 4.50% at present. The market is discounting a couple of additional rises to around 5.25%. **The European Central Bank (ECB)** started raising rates in July 2022 and **has increased them by 375bp** to bring the deposit rate to 3.25%. The market is still discounting two additional increases.

Benchmark rates in developed countries

Source: Bloomberg WIRP. Data as of 22/05/2023.



What can we expect in the coming months?

Interest rates are already pretty tight but, given that the effect of monetary policy is subject to a lag, we will have to wait to see the full impact on the economy. Therefore, **the pause should last a few months, during which central banks will foreseeably continue to monitor inflation and also the intensity of the economic slowdown. The historical average pause in monetary policy by the US Federal Reserve is about 5 to 6 months. Faced with marginal rate hikes in the short term, the market is focusing on when the first rate cut will come.**

How does fixed-income typically react to a scenario of a pause or future rate cut? The concept of duration.

Bond prices have an inverse relationship with interest rates. In other words, if interest rates rise, bond prices fall (and vice versa).

The sensitivity of a bond's price to changes in interest rates is measured through duration. The duration of a bond is the maturity-weighted average of all the flows from that bond. In other words, it expresses in years how long it will take for the cash flows from that bond to be paid. Since most of a bond's cash flows tend to be paid at the end (e.g. the principal) the duration will be similar to the maturity.

In the case of zero-coupon bonds, a bond's duration will be exactly the same as its maturity. That is, the time remaining until the maturity date.For example, if a zero coupon bond matures in 5 years, the duration of that bond is 5 years.

Modified duration measures a bond price's sensitivity to small changes in market interest rates.

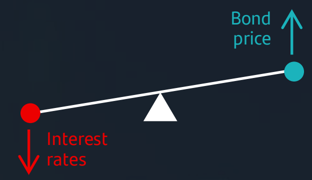
The duration of a bond is the maturity-weighted average of all the flows from that bond

The greater the duration, the greater the bond price's sensitivity to interest rate movements

Given the inverse relationship between bond prices and interest rates, **if we expect rates to fall (and that is our scenario for the near future) it is reasonable to extend the duration since the price will rise**

In a situation of rising interest rates, we try to minimise the duration of our portfolios in order to minimise the price impact of those increases.

Conversely, if we expect interest rates to fall, it makes sense to extend duration.



Example

Assume a bond with a modified duration of 5 years. If interest rates fall from 5% to 4.5%, the price of the bond will rise by 2.5%. The percentage by which the bond price may move in the face of changes in interest rates is calculated as follows:

% change in bond price = - modified duration x (change in interest rates)

% change in price = - 5 x (4.5% - 5%) = + 2.5%.

Fixed income as a defensive/diversification strategy

Correlation describes how one variable behaves with respect to another. If the correlation is positive, the two variables move in the same direction (blue area in the lower chart); if it is negative (red area), one variable falls if the other rises.

In 2022, all markets fell as a result of aggressive rate hikes, which meant that fixed-income, the standard safe haven asset in the face of falling equity valuations, was unable to fulfill its defensive and diversifying role.

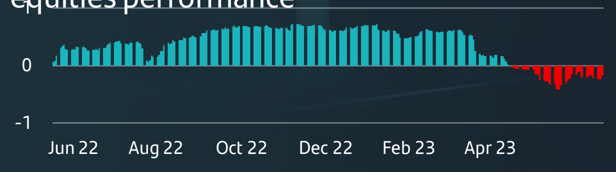
Bonds have returned to normal levels, enabling them to serve once again as a form of diversification/safe haven for times of market volatility. As can be seen in the chart above, at the time of the collapse of some regional banks in the United States last March, bond prices (white line) rose due to the possibility of future monetary policy tightening/relaxation to control financial instability, and the stock market (red line) fell due to the bank failures. In this case, portfolios or bonds with longer duration benefited more from the movement.

Global bond and equities performance

Fixed-income has regained its ability to offer diversification

Source: Bloomberg. Data as of 02/06/2023.

Correlation between fixed-income and equities performance



How to position oneself in this rate environment?

By investing in professionally managed collective investment vehicles that provide access to a well-diversified portfolio of fixed-income instruments, both **government** and **corporate**, with **longer duration**.

At this point in the cycle, we believe the risk/return trade-off favours **high-quality issuers**.

To summarise, the **sort of product to look for** would be:

01 Actively managed through a **mutual fund**

02 **A portfolio of** high credit quality — both govies and corporates

03 **Durations of approximately** 6 years

Important Legal Information