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Upward slope: start rolling down

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Amid long yields that would climb marginally higher but at a slower pace, and short-term yields that will stay below inflation in many developed countries, investors scarcely have a choice when it comes to boosting the performance of their bond portfolios: either take on credit risk or duration risk. While the first choice seems obvious in light of the unanimous popularity of corporate and other high yield bonds in the market, the second choice is counter-intuitive at first glance. You'd have to be crazy to take on duration when rates are climbing...well actually, maybe it's not so crazy afterall!

Fabrizio Quirighetti
Macroeconomic Strategist

Adrien Pichoud
Chief Economist & Senior Portfolio Manager

The roll-down can even be a winning strategy amid rising yields.

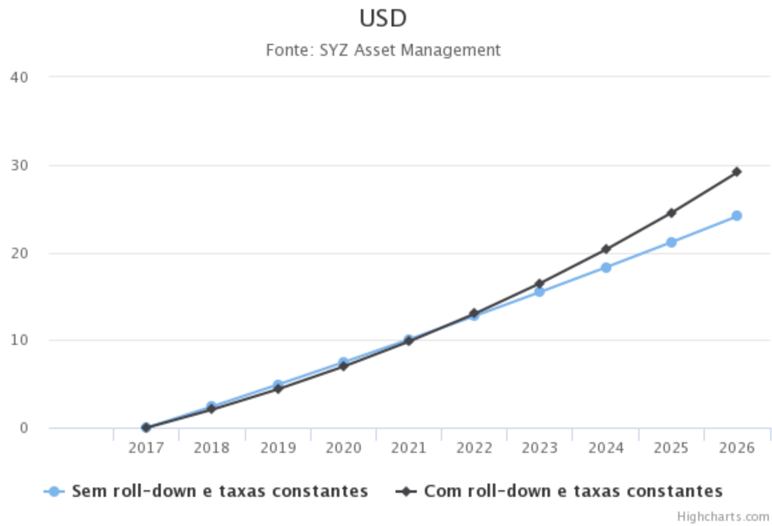
Will there be a bond crash? Not likely

Despite the many pessimists, there will probably not be another bond crash in the immediate future, aside from the one we've just had - a miniature version of the apocalypse we were told to expect. Now, that doesn't mean that yields cannot climb higher, only that the climb should be more gradual and therefore virtually painless for bond portfolios. In line with events between 2003 and 2006, when, after US 10-year yields soared from 3.1% to 4.6% during the summer of 2003 (the market had abruptly begun to anticipate a tightening of US monetary policy after the labour market outlook improved... well, what do you know !), it took three more years for the 10-year yield to stand 60 basis points (bps) higher at 5.2%. As for the upward trajectory of yields in 2013 and 2015, they have hung fire, with long-term yields returning to new historic lows in 2016.

From theory to practice

Consider an investor who buys a 10-year bond today that corresponds to his investment horizon. Suppose that he has the choice between keeping that position with a known yield to maturity (equal to the coupon if the purchase is at par value, i.e. 100) or trading it in each year for a new 10-year bond (he sells the position in the portfolio, which then has a nine-year maturity, to repurchase the "new" 10-year bond). This is what's known as rolling down the curve. For those who regularly practice bond management, it's natural that, if you expect yields to fall over the period (in the interest of simplicity, we'll only consider parallel movements over the entire yield curve), it would be best to do the trade-in each year to keep as high a duration as possible (technical measure that gives an approximation of the bond's price sensitivity to changes in yield): every year, the investor will obtain ever greater gains between the sale price of the nine-year bond and the purchase price of the new 10-year bond, more than offsetting a coupon that will decline along with yields.

Now let's suppose that yields for all maturities remain the same over the next 10 years. On 20 January 2017, nine- and eight-year yields on US T-notes are 2.43% and 2.28%, respectively. If you buy the nine-year government bond today and keep it until maturity, you will realise an average yearly performance of... 2.43%. What happens to that performance if you trade in your bond every year ? After holding it for one year, since the eight-year yield is lower (upward slope) and, we presume, the yield curve has barely budged, the yield purchased the previous year at 100 with a "notional" 2.43% coupon is now an eight-year bond that must have annualised yield to maturity of 2.28% (rate unchanged) and a price of above 100... in fact the price would be about 101.09. So in the space of 12 months, you've garnered an overall performance of 3.52% (or $3.52 for an initial investment of $100): 2.43 from the coupon + 1.09 from the bond price's appreciation. Assuming yields are stable, then, we can generate (positive !) performance above the expected yield... as long as we take action, rolling down rather than waiting for the bond to mature. Naturally, it is also a matter of dealing with minimal trading costs, which is generally the case for institutional investors.

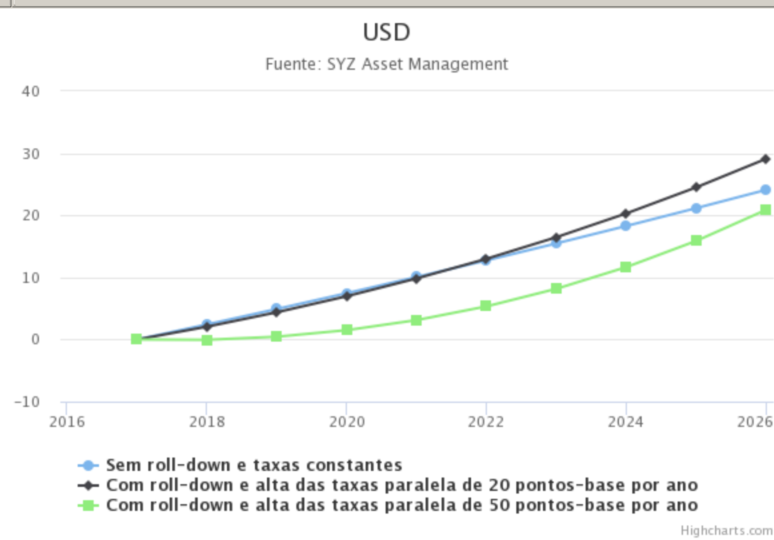


In short, in some cases it's advisable to keep the duration risk, even when we're dealing with very low or negative yields, which we are today.

Maintain the same duration even during

Better still...the roll-down can even be a winning strategy amid rising yields. This will depend on (among other things) the slope of the yield curve, the speed with which yields are rising, and how long it will last and/or the maximum level they will reach as a result. Depending on the level of yields and the holding period, we can even determine the maximum speed at which a rate increase would annihilate the yield surplus generated by the roll-down. For our example on the US T-note curve above, still supposing a parallel and constant movement of the curve, yields would have to rise - over the next nine years - faster than 0.35% per year for nine years. Obviously, the steeper the slope, the greater the gain from rolling down : if the eight-year yield were 2.18% instead of 2.28%, the annual gain would be $4.25 instead of $3.52 ($1.82 gained on the price instead of $1.09), and the maximum speed of yield increase "tolerated" by this strategy would be 66 bps per year, not 35.

Another way to approach the problem would be to optimise the holding period, according to the slope of the curve. Or decide where best to position ourselves on the curve at the outset. In short, in some cases it's advisable to keep the duration risk, even when we're dealing with a normalisation of yields, which we are today.



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