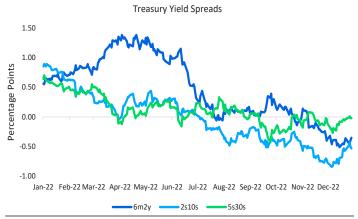


The Bloomberg U.S. Aggregate Bond Index rose +1.9% during the quarter as Treasury yields beyond the 2-year point were relatively unchanged and investment grade corporates saw some spread tightening. The front-end continued to rise in response to a 125 basis point increase in the fed funds rate. 10-year breakeven inflation rates rose 15 basis points to 2.30% as the nominal yield increased 5 basis points to 3.88%, while real yields finished the quarter lower by 10 basis points at 1.58%.

We wrote <u>last quarter</u> about TARA - "There Are Reasonable Alternatives" – as surging bond yields present investors with attractive opportunities in fixed income. Capital is flowing back to the asset class, but with the inversion of the yield curve becoming even more pronounced during the fourth quarter, most investors remain underweight on a duration adjusted basis. With a 6-month Treasury offering 4.8%

Figure 5. All Key Treasury Spreads Have Fallen to Negative Territory



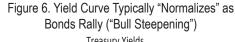
Source: US Treasury Department

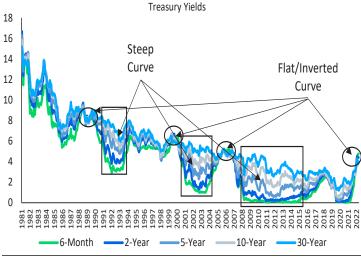
yield compared to the 10-year at 3.9%, is there reason for investors to venture outside the curve? How does the yield curve typically "normalize", and does it pay to take duration risk during these periods?

Prior curve inversions provide some context. Using the 2-year and 10-year maturities ("2s10s") as the key rate spread, the curve most recently inverted in 2000 and 2006, and prior to that 1989 (we'll ignore the flirtation with inversion in 2019; while it followed a similar path, the subsequent easing cycle was expedited by Covid-19). It typically follows that the curve inverts during a period of central bank tightening resulting in a "bear flattening" of the yield curve – i.e., bond prices tumble with yields rising along the curve, while short-end rates rise more than long-end rates. This tightening then leads to economic slowing that justifies an easing of financial conditions triggering a "bull steepening" of the yield curve – i.e., bonds rally as yields fall along the curve with short-end rates declining more than long-end rates.

Will this time be different? The market certainly doesn't think so. The fed funds rate now exceeds the 5-year / 5-year forward rate, an indicator of impending cutting cycles. Similarly, the fed funds futures market is pricing two further rate hikes taking the policy rate to 5.0% before the Fed begins to backpedal in the second half of the year.

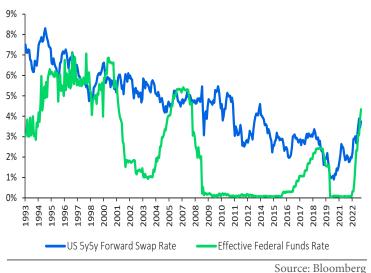
This all tracks the 2000 and 2006 experience whereby the yield curve inverted and swap spreads slipped below the fed funds rate months before the Fed completed its hiking cycle. In 2000, long-term rates peaked well ahead of short-term rates, while in 2006 the two topped out around the same time. While investors ultimately benefited from being long duration in both environments, it was better to be patient in 2006 as the Fed paused for an extended period. Although it's impossible to call the near-term path of rates, the indicators have begun to stack up favorably for fixed income opportunities and would support thinking about adding duration back to fixed income allocations at some point in the near future.





Source: Federal Reserve Bank of St. Louis

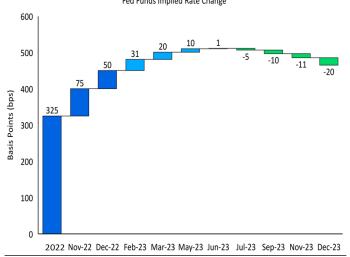
Figure 7. Fed Funds Rate Exceeding Forward Rates
Typically Precedes a Cutting Cycle



Source. Bloomberg

Figure 8. Fed Funds Futures are Pricing Two More Hikes to be Offset by Cuts in the Second Half of 2023

Fed Funds Implied Rate Change



Source: Bloomberg