Fixed Income Relative Value (FIRV) is back on investors’ radar screens thanks to an improving opportunity set following the election of Donald Trump and the perceived baton-pass from monetary policy preeminence to fiscal policy primacy. As market participants more tactically adjust their portfolios in response to this and other market factors, this creates arbitrage opportunities that only a select group of investors can potentially source. What makes FIRV special is that, unlike other fixed income strategies, there only need be identifiable differences and mean-reversion between like securities to pursue total return. While the direction of yields matters much less for FIRV strategies, their performance historically improves with higher rates.

Why Relative Value: An introduction to a timely, niche strategy

As one of the longest standing hedge fund strategies, FIRV – which is a ‘market-neutral’ or an ‘absolute return’ strategy – can utilize a broad set of trade constructions intended to exploit valuation discrepancies between fixed income securities. These constructions can include yield curve arbitrage, swap spread arbitrage, mortgage arbitrage, volatility arbitrage, and credit arbitrage. To generate returns, a portfolio is constructed with the intent of exploiting specific market inefficiencies and pricing anomalies along the yield curve. What investors generally find attractive about FIRV is that it can offer positively skewed returns with little correlation to other asset classes. This is due largely to the fact that the direction of yields matters very little: it’s the inherent idiosyncratic differences in relationships between comparable or ‘like’ securities which drive performance with this approach, and these can be created just by higher volumes and wider interest rate ranges.

To help illustrate this point, consider a ‘standard’ yield curve reflected in Figure 1. From a high-level perspective, the curve appears relatively uniform. However, upon a closer look (Figure 1b) the same yield curve appears much less uniform as securities with similar maturities, but different issue dates, coupons and liquidity profiles trade with different yields. These anomalies can exist in liquid markets due to market participants having different mandates, market objectives and liquidity needs.

Figure 1a, b: Relative Value is both Art and Science, requiring a trained eye to implement

Source: Schroders. For illustrative purposes only. On-the-run generally refers to the most recently issued U.S. Treasury bonds or notes of a particular maturity. Off-the-run generally refers to securities that have been issued before the most recent issue and are still outstanding.
In our view, identifying cheap and rich securities is only the beginning of our process. The difficult part is deciding which pricing discrepancies have near-term catalysts to move these valuation anomalies back in line. Historically, known catalysts have taken the form of:

- Treasury issuance (auctions/maturity of debt)
- Futures cycles (delivery and calendar rolls)
- Issues rolling from one maturity basket to another (on-the-run/off-the-run)
- Federal Reserve meetings/policy/balance sheet (changes in interest rate policy)
- Asset swaps (the yield spread between UST and matched-maturity swaps)

**Leverage and FIRV: An important instrument...if used properly**

Because the mispricings that FIRV is attempting to exploit are smaller in nature, leverage is a component of this approach. As described above, the approach is not attempting to lever ‘carry’, but is intended to use leverage to reduce market risk and replace it with spread risk. The amount of leverage used is primarily dependent on the nature of the opportunity, and the proximity and reliability of the catalyst that is expected to return a perceived mispricing to fair value. In the case of a judicious FIRV approach, the amount of leverage is not determined by seeking to achieve bigger ‘bets’ or a higher return. The strategy is more likely to employ higher levels of leverage in more tightly constructed trades which typically have the lowest level of volatility. Cash vs. futures trades represents the tightest trade constructions and the purest form of arbitrage which would likely have the highest level of leverage applied. With the types of recurring investment opportunities mentioned previously, we can visually see that the amount of leverage applied and risk tend to go in opposite directions.

**Figure 2: A typical sliding scale illustration of how varying degrees of leverage may be used within an FIRV strategy**

Source: Schroders. For illustrative purposes only. Strategies and technique opinions herein are those of the author, and do not reflect any actual portfolio. Butterflies refer to a strategy that seeks to exploit the relative-value of the ‘belly’ versus the ‘wings’ of a three-pronged position. These relationships are less market-directional, especially when deployed using narrower maturity construction.

Determining and subsequently applying the right amount of leverage to each opportunity and trade construction is one of the key investment and risk management decisions within the FIRV strategy.

**Case Study: BREXIT – FIRV positioning around a macro event**

Positioning in anticipation of and in the aftermath of Brexit provides, in our view, some clarity and insight into how a relative value strategy can be managed. Prior to the vote, one-day options providing exposure to the outcome of the vote were trading at a materially higher implied volatility than options expiring in subsequent weeks. While pumped up short term volatility is quite common, selling one-day options and buying the same strike, one-week options, and paying only a small net premium, allowed an investor to be long forward volatility with very limited defined downsides.

After the vote, there was a tremendous rally in bond prices (and concurrent fall in yields) which created a few notable pricing anomalies; futures sectors materially led the rally, providing mean-reverting opportunities around that theme. The significant drop in yields could potentially lead to profit-taking in off-the-runs as they cheapened vs. on-the-runs in multiple sectors, as liquidity premiums expanded.
The Brexit decision also resulted in the market unwinding all pricing of rate hikes in 2016 and actually priced in some Fed easing subsequent to the vote. Given the now zero probability of a hike (at the time of Brexit), several trades could be constructed with defined downside that would benefit if the market went back to pricing Brexit as a local, rather than a global, event.

So, this is a case where in front of a macro event, pair trades existed that allowed for a position in an attractive volatility skew. In the aftermath of the surprise outcome, idiosyncratic pricing anomalies occurred allowing for position-taking related to the richening futures; tight curve and butterfly trades existed to take advantage of rich off-the-runs, and; slightly more macro FIRV constructions existed to take advantage of a very one-sided Fed forecast concerning future rate decisions.

Why Relative Value Now: Trump and Central Bank Limits as Game-Changers

The press has written extensively about the changes in market liquidity under the Dodd-Frank (Wall Street Reform and Consumer Protection Act of 2010) and Volcker Rule therein (prohibits a bank or institution that owns a bank from materially participating in proprietary trading), both of which have had a profound impact on the fixed income markets. Primary Dealers in the U.S. Treasury market are executing a smaller share of daily trading activity, proprietary trading desks largely no longer exist, and there has been a large increase in the demand for the liquidity of futures contracts and other off-balance-sheet instruments. All of these factors have led to structural changes in position sizes and pricing relationships, resulting in what we consider attractive arbitrage opportunities – despite historically low yields. The results are perhaps most striking in swap spreads which have gone and stayed negative in long intermediate treasuries. While it is unknowable what regulatory changes may be in store in the new administration, anything that fundamentally changes the ability of banks/dealers to hold more treasuries on their balance sheet for liquidity purposes may be a game-changer for the current level of swap spreads.

Another game-changing result of the election is in the level of term premium which can be defined in many ways but which we use to represent the ‘appropriate’ steepness of yield curves. In a QE/Central Bank balance sheet-dominated environment, term premium becomes compressed as central bank purchases depress the market level of interest rates. When the baton is perceived to be passing from monetary to fiscal policy primacy and the market perception of a more ‘capitalism friendly’ administration, we can see how markets react, as previously depicted in the term-premium chart in Figure 1.

What the above suggests to us is that the last five years of central bank balance sheet expansion brought term premium negative (which the Fed defines as how much lower 10-year yields are because of their activities). While term premium jumped to a positive number after the election, we can see that we are well over 100bp away from levels that existed just two years ago, and almost 200bp away from levels that existed five years ago. Simply stated, higher term premium historically has meant higher levels of long-end rates and higher levels of volatility, a favorable environment for a relative-value approach that can potentially thrive during more volatile periods.
Some of the more recent opportunities are likely a function of the new market regime which includes less sell-side capital, an increased demand for liquidity, and tighter balance sheet requirements. The result of stressed dealer balance sheets may be larger, recurring idiosyncratic dislocations.

The existence of opportunities for FIRV strategies are merely the result of market participants with different mandates and investment restrictions. As those participants adjust their portfolios more actively, it creates opportunity. FIRV strategies, therefore, can be deployed when there are identifiable differences in yields between like securities, potentially leading to non-correlative returns. The path of yields, for the most part, matters much less, making this approach a potential complement to an asset allocation model.

Of course, FIRV can be a complex investment strategy; one in which only a few market participants can skillfully engage. However, given the variety of factors at play within the fixed income market, we believe now may be the right time to consider a dedicated relative-value fixed income approach, especially for those investors seeking a truly diversified source of alpha potential.

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