GLOBAL X
by Mirae Asset

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Related ETFs

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IRVH - Global X Interest Rate Volatility & Inflation Hedge ETF

GLOBAL X ETFs RESEARCH

Preparing a Fixed Income Portfolio for the Eventual Steepening of the Yield Curve

After 11 hikes since March 17, 2022, the Federal Reserve (Fed) paused its quantitative tightening and at its December meeting, plotted a series of rate cuts in 2024. These developments create a much different outlook for fixed income markets as they introduce the possibility of a steeper yield curve. The difference between 10-year U.S. Treasury yields and 2-year U.S. Treasury yields (2s10s) was still negative as of 2023 year-end, but inflation metrics appear promising and on a downward trend. In our view, a systematic, options overlay on a fixed income portfolio using interest rate options may provide some defense as the yield curve potentially steepens.

In this scenario, the Global X Interest Rate Volatility & Inflation Hedge ETF (IRVH) may be a worthy consideration for investors looking to enhance a fixed income portfolio's risk management capabilities.

Key Takeaways

- History tells us that the yield curve eventually "un-inverts," and with inflation receding and interest rate cuts now part of the Fed's dialogue for 2024, the seeds are in place for it to steepen. But timing this move is difficult, potentially leaving income investors flat-footed.
- The interest rate options market is where institutional investors often go to add a level of risk management to fixed income portfolios. IRVH offers retail investors access to this market.
- Traditional fixed income index tracking strategies are popular among income investors looking to gain core fixed income exposures. IRVH may be a suitable complement to achieve prudent fixed income portfolio diversification.

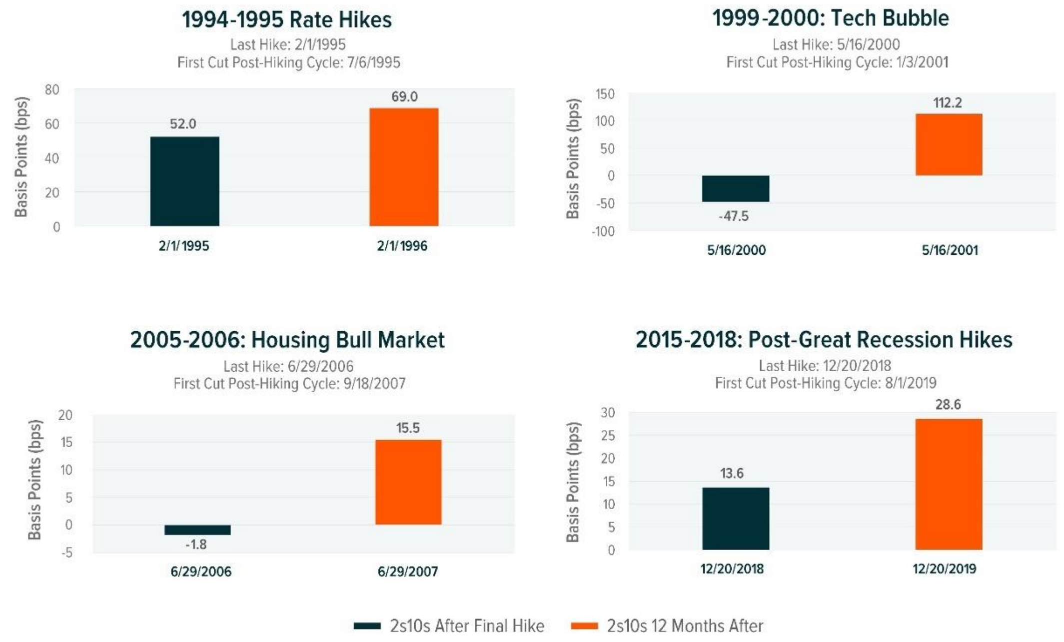
Yield Curve History Doesn't Repeat, It Rhymes

The short end of the yield curve tends to reflect central bank monetary policy. However, long-end, nominal yields typically exhibit a term premium due to the uncertain path of inflation over the duration of a bond's life.[1] As central banks enact monetary tightening (or easing) measures to combat elevated inflation, shorter-term tenors tend to reflect higher (lower) rates quickly. All else equal, this catalyst typically lowers (increases) inflation expectations and interest rates for the longer end of the yield curve, resulting in a negative slope (positive slope) of the yield curve. The federal funds rate has historical demonstrated a -0.64 correlation with the 2s10s yield curve spread since June 1976.[2]

Recent Fed hiking cycles depict this dichotomy. In the 12 months following the final hike of each analyzed cycle below, three out of the four periods saw at least one rate cut and the 2s10s steepened by a median of 17 basis points.

2s10s STEEPENED AFTER THE FED'S MOST RECENT HIKING CYCLES

Source: Global X ETFs with data from Bloomberg and Forbes, measured from 2/1/1995 to 12/20/2019 analyzing the next 12 months of 2s10s movements after the Fed's final rate hike in each hiking cycle.



However, not all final rate hikes in the above timeframes occurred at a time when the 2s10s was inverted. The mean-reverting forces from a negatively sloped 2s10s to a positive 2s10s are difficult to pinpoint in the short term. Historically, it has taken anywhere from 58 to 624 calendar days for the 2s10s to resume a consistent, positive slope after the first day of consistent inversion. The current inversion cycle is on the higher end of the historical range. Thus, a strategic allocation to yield curve spread options may be prudent in the current environment.

THE YIELD CURVE GENERALLY STEEPENS OVER VARIOUS TIME LENGTHS, DEPENDING ON THE CURRENT STATE OF THE ECONOMIC CYCLE

Source: FRED, as of 12/31/2023. Note: Negative (Positive) 2s10s maintained for at least 30 days after First Day of 2s10s Inversion (Positive Slope) Occurs.

First Day of 2s10s Inversion	First Day of Positive Slope After 2s10s Inversion	No. of Days to Reach Positive Slope After Inversion
8/17/1978	5/2/1980	624
9/12/1980	11/6/1981	420
1/20/1982	7/19/1982	180
1/4/1989	6/30/1989	177
8/11/1989	11/7/1989	88
6/5/1998	8/5/1998	61
2/2/2000	12/29/2000	331
1/31/2006	3/30/2006	58
8/14/2006	6/7/2007	297
Median		180
Average		248
	Current 2s10s Inversion	
7/5/2022	--	544 Days and Counting

IRVH May Be a Solution for a Steeper Yield Curve

The deep, U.S. dollar denominated, over-the-counter interest rate options market currently has $23 trillion in notional amount outstanding.[3] Traditionally, access to this robust market was difficult for retail investors to obtain because it required a direct counterparty, such as a large bank. The Global X Interest Rate Volatility & Inflation Hedge ETF (IRVH) provides access in the form of yield curve spread option exposure.

IRVH owns a portfolio of TIPS designed to provide inflation-protected income, paired with an overlay of yield curve spread options. These options are designed to benefit when the spread between 10-year and 2-year interest rates increase and are designed to benefit when short-term interest rates fall or long-term interest rates rise, all else equal. They may provide a hedge against an increase in inflation expectations, potentially giving investors the opportunity to speculate or hedge against potential movement in the yield curve.

POTENTIAL IRVH PERFORMANCE SCENARIOS

Source: Global X ETFs.

High Real Rates

Curve Steepness	Description		Expected Performance
Steeper	Higher real rates and steeper curve	Bear Steepener	Positive performance if steepening exceeds rate sell-off. Negative performance if rate sell-off exceeds steepening.
Flatter	Higher real rates and flatter curve	Bear Flattener	— —
Flatter	Lower real rates and flatter curve	Bull Flattener	Positive performance if lowering in rates exceeds curve flattening. Negative performance if curve flattening exceeds lowering of rates.
Steeper	Lower real rates and steeper curve	Bull Steepener	+ +

Lower Real Rates

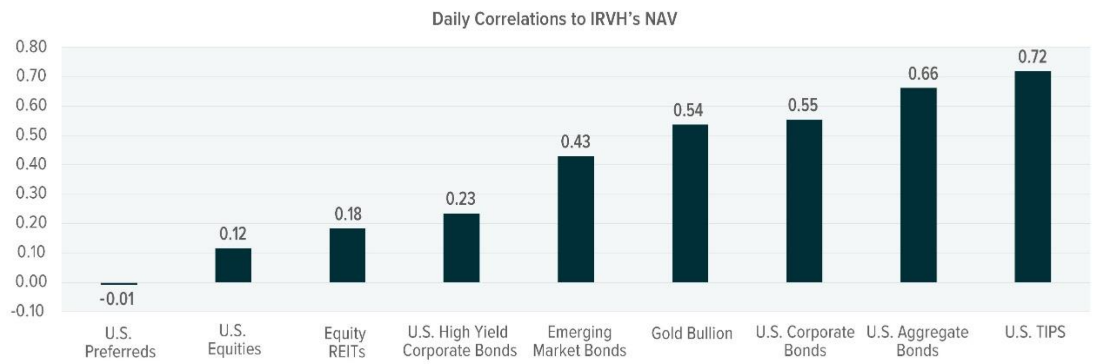
Note: *For illustrative purposes only.*

IRVH Can Bring More Diversification to a Fixed Income Portfolio

With $300 billion in assets under management (AUM) currently tracking it, the Bloomberg US Aggregate Bond Index (Agg) is a popular way to implement core fixed income exposure in a portfolio.[4] However, U.S. Treasury bonds and mortgage-backed securities comprise 67% of the Agg's total allocation.[5] For investors looking for additional diversification, they may find IRVH a capable strategy given its exposure to TIPS and yield curve spread options, which is exposure that the Agg does not currently maintain. This has translated to lower correlations between IRVH and other sub-asset classes across equities and fixed income.

DAILY CORRELATIONS TO IRVH DEMONSTRATE A LEVEL OF DIVERSIFICATION POTENTIAL FOR A YIELD CURVE STEEPENER STRATEGY

Source: Global X ETFs with data from Morningstar Direct, measured from 07/05/2022 to 12/31/2023.



Asset class representations are as follows: U.S. High Yield Corporate Bonds, Bloomberg US Corporate High Yield Bond Total Return Index; U.S. Preferreds, ICE BofA Diversified Core U.S. Preferred Securities Index; U.S. Aggregate Bonds, Bloomberg US Aggregate Bond Index; Emerging Market Bonds, Bloomberg Emerging Markets USD Aggregate Bond Total Return Index; U.S. TIPS, Bloomberg US Treasury Inflation Notes TR Index; U.S. Corporate Bonds, Bloomberg US Corporate Bond Total Return Index; Equity REITs, FTSE Nareit All Equity REITs Index; Gold Bullion, S&P GSCI Gold Index; U.S. Equities, S&P 500 Index. Correlations calculated using fund NAV returns.

Past performance is not a guarantee of future results.

Conclusion: Investors May Want to Brace Their Fixed Income Portfolios

The fixed income market appears to be at a turning point with the Fed signaling that its hiking cycle is over with inflation on a clear downward trajectory. The most recent reading of the Personal Consumption Expenditures (PCE) Price Index (Core PCE, ex food and energy) at 3.2%, its lowest since April 2021.[6] As the yield curve shifts through this process, we believe that IRVH can offer investors a defensive posture through its systematic strategy of a core TIPS portfolio paired with yield curve spread options.

Footnotes

1. Ilmanen Antti 2012. Expected Returns on Major Asset Classes. Charlottesville, VA: Research Foundation of CFA Institute.
2. Source: Morningstar Direct, measured monthly from 06/1976 to 10/2023 and accessed on December 07, 2023 with Global X's Morningstar Direct License.
3. Source: Bank of International Settlements, measurement is semi-annual as of 6/30/2023.
4. Source: Morningstar Direct, measured as of 12/31/2023 and accessed on January 02, 2023 with Global X Morningstar Direct License.
5. Ibid.
6. Source: Morningstar Direct, measuring the lowest point of Core CPI in 2023 relative to the last time this point was previously reached.

Glossary

Bloomberg US Aggregate Bond Index: The index measures the performance of investment grade, U.S. dollar-denominated, fixed-rate taxable bond market, including Treasuries, government-related and corporate securities, mortgage-backed securities, (agency fixed-rate and hybrid ARM passthroughs), asset backed securities, and commercial mortgage-backed securities.

Personal Consumption Expenditures Excluding Food and Energy: A measure of the prices that people living in the United States, or those buying on their behalf, pay for goods and services. The change in the PCE price index is known for capturing inflation (or deflation) across a wide range of consumer expenses and reflecting changes in consumer behavior. This version excludes food and energy product prices.

Nominal Yield: the stated yield of a bond.

Tenor: refers to the length of time a bond has until its maturity date.

Correlation: Correlation indicates the strength of the linear relationship between two different variables, measured from -1 to 1. A correlation that is greater than zero indicates a positive relationship. A value that is less than zero signifies a negative relationship. A value of zero indicates no relationship between the two variables.

Basis Point: Used to express the change in value or interest rates. One basis point equals 0.01%

risk, where an issuer may exercise its right to pay principal on an obligation later than expected, as well as interest rate/maturity risk, where the value of the Fund's fixed income assets will decline because of rising interest rates.

The Fund's exposure to derivatives tied to interest rates subjects the Fund to greater volatility than investments in traditional securities, such as stocks and bonds. Investing in derivatives can be extremely volatile.

The Fund engages in options trading. An option is a contract sold by one party to another that gives the buyer the right, but not the obligation, to buy (call) or sell (put) a stock at an agreed upon price within a certain period or on a specific date. In an interest rate swap option, the Fund has the right, but not the obligation, to enter a swap contract at a future date, where the Fund pays a fixed interest rate and receives a floating interest rate. The Fund is expected to benefit from the options it holds if long-term U.S. interest rates rise during the time period in which the Fund holds the options. However, if long-term rates decrease, the Fund will lose money on the options, up to the amount invested in option premiums, and underperform an otherwise identical bond fund that had not used such options. Over-the-counter options are traded directly between counterparties rather than on a centralized exchange. Such options may trade less frequently and in limited volumes and thus exhibit more volatility and liquidity risk.

Shares of ETFs are bought and sold at market price (not NAV) and are not individually redeemed from the Fund. Brokerage commissions will reduce returns.

Index returns are for illustrative purposes only and do not represent actual fund performance. Indices are unmanaged and do not include the effect of fees, expenses or sales charges. One cannot invest directly in an index.

Carefully consider the Fund's investment objectives, risks, and charges and expenses before investing. This and other information can be found in the Fund's summary or full prospectuses, which may be obtained at globalxetfs.com. Please read the prospectus carefully before investing.

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