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At Hi-Line Capital Management, our intrinsic-value philosophy and decision-making principles drive how we approach investing and provide guard rails for thinking during periods of extreme uncertainty and volatility. Our piece, *Foundational Decision-Making Principles*, details the seven pillars of our decision-making process and its critical function in long-term success and rationality.

How to Think About Markets:

1. Confidence in Long-Term Expectations
2. **Expect Pricing Volatility**

Risk Management:

3. Invest with a Margin of Safety
4. Be Business-like
5. Be Conservative
6. Continuously Assess Risk

Lastly

7. Control the Controllable

ABOUT HI-LINE CAPITAL  
MANAGEMENT

Hi-Line Capital Management, LLC ("HLCM"), based in Watertown, SD, provides investment management and advisory services for institutional and individual clients. The firm was founded in July 2009, became a registered investment advisor (RIA) with the U.S. Securities and Exchange Commission ("SEC") in March 2010.

## INCOME INVESTING IN A RISING RATE ENVIRONMENT *April 2022*

Interest rates are like gravity in determining the overall stock and bond market valuations. A high interest rate increases the gravitational pull-on valuation. Conversely a low interest rate has less gravitational pull. Translation, higher interest rates equal lower prices and lower interest rates equal higher prices.

Since 1982, asset prices have been increasing, due partly to interest rates declining from 20% to less than 1%. This means an entire generation has not experienced a rising interest rates environment. During Q1 2022, the 2-year treasury increased by nearly 1.6%.... the biggest increase in 40 years. As a result, nearly all bond strategies declined in price. Yes, bonds experience negative returns too.

Therefore, if inflation remains elevated and monetary policy finally reverses an era of "easy money," interest rates will rise in the future and investors will need to change their investment strategy.

### THE IMPORTANCE OF DURATION

Have you heard of the term duration when reviewing an income strategy? Duration calculates the combined effects of yields, interest payments, and timing of payments into a singular number for a parallel shift in interest rates. Importantly, bond prices and interest rates move in opposite directions (inversely related). This means duration describes bond volatility to interest rate changes. The following "rule of thumb" exists:

$$\text{Change in Interest Rate} \times \text{Duration} = \% \text{ Change in Bond Price}$$

For example, a bond with a duration of 5.0 will experience a 5% decline in price when interest rates increase by 1.0%. If interest rates were to increase by 2.0%, the bond's price would decline by 10%. If interest rates increase 3.0%, the bond's price would decline by 15%. The higher the duration number, the higher the price volatility of the bond.

The Inflation Protected Income strategy is designed to protect against rising interest rates, which may be caused by inflation. One type of security used in the Inflation Protected strategy is called a "variable preferred". A variable preferred can be very effective during a period of rising rates. A variable security's coupon will adjust quarterly or semi-annually based on a "benchmark rate". Furthermore, the coupon paid will be based on the benchmark rate plus a predetermined spread above the benchmark rate. And since the coupon payments is frequently adjusted, the duration will be less than 1.0, thereby reducing interest rate risk.

The following is an example of a variable preferred security in the portfolio. During Q1 2022, the benchmark rate was reset to 1.00% annualized. The spread above the benchmark rate, which never changes, is 3.50%. Therefore, the annualized coupon percentage of the security increased from 3.70% to 4.50% during the last quarter as outlined below:

	Benchmark Rate	Predetermined Spread	Annualized Coupon %
Q4 2021	0.20%	+ 3.50%	= 3.70%
Q1 2022	1.00%	+ 3.50%	= 4.50%

The benchmark rate used in the above example is based on 3 Month Libor, which serves as a common proxy for short-term interest rates. Other securities in the Inflation Protected strategy will use other benchmark rates such as the yield on 5-year treasury bonds.

### Conclusion

The higher the duration number, the higher the volatility. And when interest rates increase, the result is negative pricing creating return headwinds for income strategies.