



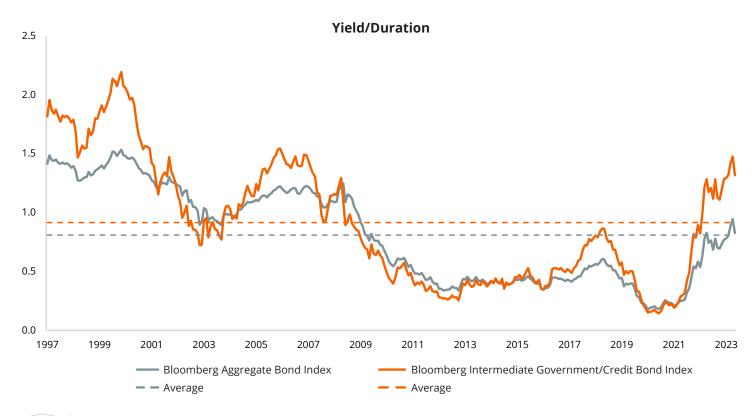
BOND CONCEPTS

Why Accept More Risk for Comparable Yield?

With interest rates across the yield curve luring investors back to fixed income, we think it prudent for advisors and investors to consider the risk and return tradeoff in their fixed income allocation and ensure they are being adequately paid for risks, particularly duration (interest rate risk). It is easy to revert to the same tendencies that caused challenges for many investors in 2022 and assume that strategies with longer durations will deliver greater yield and total return potential than intermediate-term strategies. However, when you examine current valuations and historical performance patterns, the data tells a different story.

Yield per Unit of Duration Favors Intermediate Bonds

Yield per unit of duration is one metric that can help investors compare and value bonds with different maturities. Think of it as return potential per unit of interest rate risk. Currently, the Bloomberg Aggregate Bond Index, which contains bonds with maturities ranging from 1 to 30 years, yields 5.05% with a duration of 6.1. Its yield per unit of duration sits near its historical average of 0.8. The Bloomberg Intermediate Government/Credit Bond Index, comprised of bonds maturing in 1 to 10 years, currently yields 4.86% with a duration of 3.7. Its yield per unit of duration is significantly above its historical average of 0.9. This prompts a fundamental question: why accept more risk for seemingly comparable yields?





Interest Rate Outlook and the Myth of Parallel Shifts

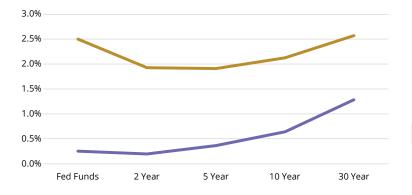
Investors should also consider the monetary policy environment and the potential for cuts to the Fed Funds rate. During periods of easing monetary policy, conventional wisdom would suggest that long-term (10-year and longer) bonds with greater sensitivity to interest rate movements would benefit the most from falling yields. However, duration does not contribute to performance in these periods as some may expect, as bonds with maturities in the intermediate range have historically performed in line with or better than bonds with longer durations during easing.

The main reason for this is that interest rates across the curve do not move down in parallel. Yields in the 1-5 year range tend to be more impacted by the Fed, and the long end of the curve does not move down as much as investors might assume.

In our analysis, we charted the returns of the aggregate and intermediate bond indices beginning two months before the first Fed Funds rate cut and ending two months after the final cut. Take out the unprecedented circumstances of COVID, and intermediate bonds performed in line with or better than aggregate bonds in each of the previous cycles.

Yield Curve Shifts

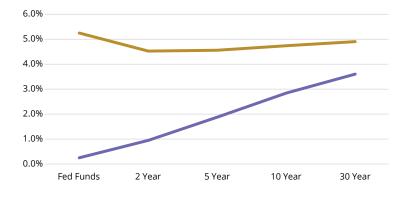
5/31/2019 - 4/30/2020



	Fed Funds	2 Year	5 Year	10 Year	30 Year
5/31/2019	2.50	1.92	1.91	2.13	2.57
4/30/2020	0.25	0.20	0.36	0.64	1.29
	-2.25	-1.72	-1.55	-1.49	-1.28

Cumulative Returns:	
Aggregate Bond	8.91%
Intermediate Gov/Credit Bond	6.79%

7/31/2007 - 1/30/2009



	Fed Funds	2 Year	5 Year	10 Year	30 Year
7/31/2007	5.25	4.52	4.56	4.74	4.90
1/30/2009	0.25	0.95	1.88	2.84	3.60
	-5.00	-3.57	-2.68	-1.90	-1.30

Cumulative Returns:	
Aggregate Bond	9.58%
Intermediate Gov/Credit Bond	9.75%

11/30/2000 - 7/31/2003 7.5% 5 10 Fed 2 30 **Funds** Year Year Year Year 6.0% 11/30/2000 6.50 5.61 5.43 5.47 5.61 4.5% 7/31/2003 1.00 1.74 3.22 4.41 5.36 3.0% -0.25 -5.50 -3.87 -2.21 -1.06 1.5% **Cumulative Returns:** Aggregate Bond 22.31% 0.0% Intermediate Gov/Credit Bond 23.64% Fed Funds 2 Year 5 Year 10 Year 30 Year 7/31/1998 - 12/31/1998 6.5% Fed 10 30 Year Year **Funds** Year Year 5.5% 7/31/1998 5.50 5.48 5.50 5.49 5.71 12/31/1998 4.75 4.53 4.54 4.65 5.10 4.5% -0.75-0.95 -0.96-0.84-0.61 3.5% **Cumulative Returns:** Aggregate Bond 4.36% 2 5% Intermediate Gov/Credit Bond 4.43% Fed Funds 2 Year 5 Year 10 Year 30 Year 5/31/1995 - 2/29/1996 7.0% Fed 5 10 30 Year Year Funds Year Year 6.0% 5/31/1995 6.00 5.84 6.05 6.28 6.65 2/29/1996 5.25 5.43 5.73 6.10 6.47 5.0% -0.75 -0.41 -0.32 -0.18 -0.18 4.0% **Cumulative Returns:** Aggregate Bond 5.93% 3.0% Intermediate Gov/Credit Bond 5.60%

Understanding the Federal Reserve's influence is crucial in navigating fixed income markets. The historical playbook, especially during the mid-to-late 90s, suggests that the Fed might keep rates higher for longer, and when cuts do occur, they might be modest. Investors must not solely rely on rate-cut expectations but also consider the nuanced responses of different bond maturities.

30 Year

Even if the Fed aggressively cuts interest rates next year, as many in the market predict, the impact on all yields might not mirror the magnitude of the cuts. By reevaluating fixed income allocations, with a focus on yield per unit of duration and a keen awareness of the Fed's impact across the entire curve, investors can better position portfolios for resilience and sustainable returns.

Fed Funds

2 Year

5 Year

10 Year

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This report is for informational purposes only and is not intended as an offer or solicitation with respect to the purchase or sale of any security.

In addition to the ongoing market risk applicable to portfolio securities, bonds are subject to interest rate risk, credit risk and inflation risk. When interest rates rise, bond prices fall; generally, the longer a bond's maturity, the more sensitive it is to this risk. Credit risk is the possibility that the issuer of a security will be unable to make interest payments and repay the principal on its debt. Bonds may also be subject to call risk, which allows the issuer to retain the right to redeem the debt, fully or partially, before the scheduled maturity date. Proceeds from sales prior to maturity may be more or less than originally invested due to changes in market conditions or changes in the credit quality of the issuer.

Indices are unmanaged. An investor cannot directly invest in an index. They are shown for illustrative purposes only, and do not represent the performance of any specific investment. Index returns do not include any expenses, fees or sales charges, which would lower performance.

The Bloomberg U.S. Aggregate Bond Index is a broad-based flagship benchmark that measures the investment grade, U.S. dollardenominated, fixed-rate taxable bond market. The index includes Treasuries, government-related and corporate securities, mortgage backed securities, asset-backed securities and corporate securities, with maturities greater than one year.

The Bloomberg U.S. Intermediate Government/Credit Bond Index measures the performance of United States dollardenominated United States Treasuries, government-related and investment-grade United States corporate securities that have a remaining maturity of greater than or equal to one year and less than 10 years.

Duration is a measure of the sensitivity of the price of a bond or other debt instrument to a change in interest rates. Duration measures how long it takes, in years, for an investor to be repaid the bond's price by the bond's total cash flows.

Yield Curve is a line that plots yields (interest rates) of bonds having equal credit quality but differing maturity dates. The slope of the yield curve gives an idea of future interest rate changes and economic activity. There are three main types of yield curve shapes: normal (upward-sloping curve), inverted (downward-sloping curve), and flat. Yield curve strategies involve positioning a portfolio to capitalize on expected changes.