



PERSPECTIVES

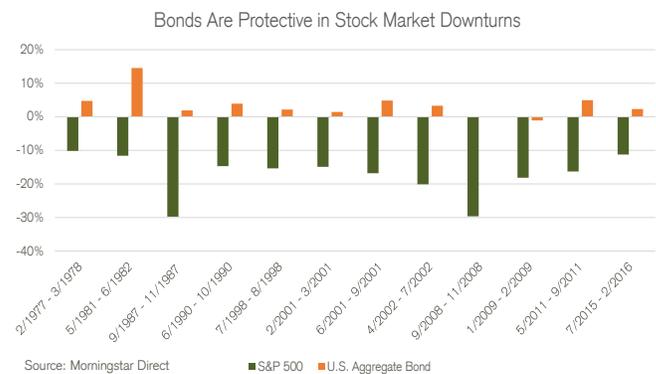
"Success is the sum of details"

-Henry S. Firestone

Safety and Income: Paracle's Approach to Bonds

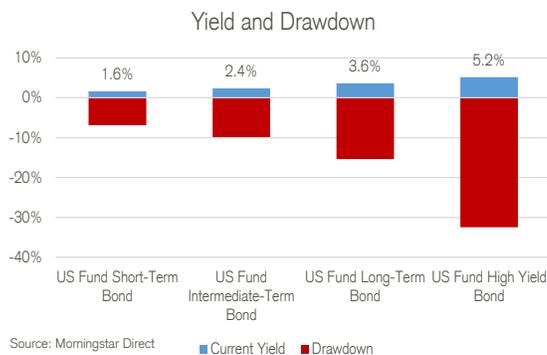
A hallmark of Paracle's investment approach is to help each family we serve develop a plan to protect 10 years of their cash flow needs with investments in bonds in order to ensure that stocks do not need to be sold at inopportune times. In this Perspectives, we will discuss our approach to investing in this unique asset class.

If one thinks of stocks as an engine of portfolio growth, bonds might be considered the brakes that prevent swerving off the road in difficult conditions. In times of poor stock market performance, bonds tend to generate positive total returns and thereby serve as a buffer for declining stock investments. The chart at right illustrates this point by showing bond returns during the worst stock market performance periods since 1976. An allocation to investment grade bonds preserves capital and also provides a resource for purchasing stocks when they are at depressed prices. Although bond values may cycle up and down as economic cycles ebb and flow, their principal value is tremendously stable compared to all other asset classes.



In addition to protecting principal value, bonds produce income in the form of regular interest payments. In fact, bonds provide more income than any other asset class, and the income component of bonds is responsible for over 90% of their total return¹.

Bonds' dual roles to provide both safety and income can actually be in conflict with one another, since the safest investments for preserving value usually offer very little income. For instance, cash and money market funds do not lose market value, but they also offer less yield than longer-term bonds. On the other end of the spectrum, longer-term bonds may offer higher yields, but have potential for extreme price drops. Our goal is to strike a good balance between the objectives for preservation and income. Safety is a foundational requirement, and we take thoughtful steps to increase yield without taking on too much risk.



In the Middle

One of the key tenets of Paracle's bond philosophy is holding a portfolio with an average intermediate-term maturity of 3 – 7 years. Holding intermediate bonds rather than longer-term bonds helps to reduce losses in the event of an increase in rates, while still maintaining a reasonable level of yield. The embedded graph illustrates this concept.

We are often asked why we don't position portfolios in short-term bonds to be even more protective, especially in environments where investors assume interest rates will rise. The simple answer is that owning short-

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term bonds gives up a great deal of income yield, which really adds up over time. Furthermore, intermediate term bonds are safe enough to meet our capital preservation objectives. Even in extreme environments intermediate bonds have never taken longer than 3 years to recover from a downturn². With this in mind, as long as an investor does not need to withdraw from their portfolio within 3 years, we consider intermediate bonds safe to own. (Cash needs within 3 years should be held in cash or short-term bonds.)

Short-Term Rates Rise More During Fed Hiking Cycles

Fed Rate Increase			Change in Short-Term Rate	Change in Intermediate-Term Rate
Start	End	Amount		
May-83	Aug-83	1.16%	1.11%	1.14%
Mar-84	Aug-84	2.25%	1.00%	0.30%
Feb-85	Mar-85	0.75%	-0.21%	-0.24%
Jul-85	Sep-85	0.31%	-0.14%	-0.24%
May-86	Jun-86	0.13%	-0.59%	-0.73%
Dec-86	Sep-87	1.38%	2.22%	2.36%
Mar-88	Feb-89	3.25%	2.11%	0.75%
Feb-94	Feb-95	3.00%	2.11%	1.07%
Mar-97	Mar-97	0.25%	0.00%	0.00%
Jun-99	May-00	1.75%	1.16%	0.49%
Jun-04	Jun-06	4.25%	2.47%	0.56%

Greater increase in rate
 Short-Term Rate: 2 Year Treasury Yield
 Intermediate-Term Rate: 10 Year Treasury Yield

Source: PIMCO

The foregoing explanation is simple, but let's spend a little more time here, since we know that it is awfully tempting to buy shorter-term bonds when rates are expected to rise. Let's answer this specific question: *Is it desirable to own short-term bonds as a defensive measure in rising rate environments?* If we study history, moving into short-term bonds at times when the Fed raised short-term rates did not turn out to be as protective as one might expect. Considering all rising rate environments since the early 1980's, short-term rates rose more than intermediate rates in 9 of 11 cycles, or 82% of the time³. Moreover, during these periods, short-term rates on average increased twice as much as intermediate-term rates, which in many cases caused short-term bonds to lose the same amount of value as intermediate bonds. Why do short-term rates move so much more? Because short-term rates are the ones that the Fed explicitly controls and adjusts to keep the economy in balance. On the other hand, intermediate rates are always subject to a variety of market factors based on longer term expectations that the Fed does not control.

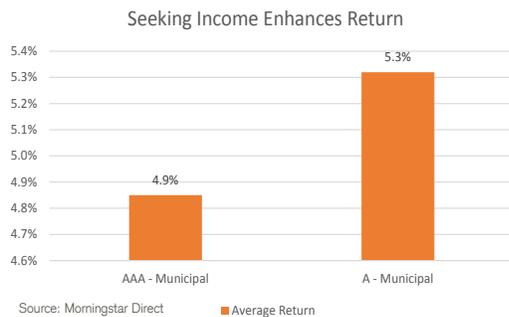
What is the takeaway? While shortening maturity may appear protective, the actual benefits of a shortened portfolio are almost always significantly offset by the greater increases in short-term rates relative to intermediate rates. Absent the ability to make perfect predictions, it is better to remain invested in intermediate bonds.

Thoughtfully Seeking Income Enhances Returns

Credit ratings are a complex and multi-faceted topic. We will barely scratch the surface in our discussion here, but highlighting a few basics is important in order to describe our investment approach. Credit ratings for investment grade bonds range from AAA on the safest side to BBB on the other side of the spectrum. As greater credit risk is taken, yield increases but so does the risk of default. Due to the increased risk of default, many investors completely avoid investment grade bonds with ratings of A or BBB. We think that this is a mistake, as we will illustrate. (Bonds below BBB in rating are considered high yield junk bonds. Given the inherent risk and volatility of non-investment grade bonds, Paracle classifies these bonds as non-traditional investments rather than as bonds. Put simply, junk bonds are not safe enough to meet our foundational capital preservation objective for bonds.)

For municipal bonds, reducing credit quality from AAA to A has increased long-term return by .40%, a meaningful amount⁴. For perspective, on a one million dollar bond portfolio, this represents an extra \$4,000 of annual income. But is it safe to do this? Yes. Moving from AAA to single A municipal issuers increases the risk of default from .00% to .03%⁵. The difference is negligible.

The story is similar for corporate bonds. Moving from AAA to A credit quality has increased long term returns by .80%⁶. The risk of default is a little greater



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than with municipal bonds, but it is still quite small. Although default risks are slightly greater with single A-rated securities, a thoughtful bond manager is able to selectively pick and choose which bonds to purchase. Managers evaluate company-specific factors to determine credit-worthiness and the likelihood of credit upgrades or downgrades. They further evaluate the structure and collateral of individual debt issues in order to identify anomalies, areas where the market may have mispriced the true worth of a security.

With regard to evaluating individual securities, it is worth noting a nuance of the credit rating process. When a large credit rating agency like S&P or Moody's downgrades an issuer, say from AA to A, this downgrade applies to *all* of the issuer's bonds, regardless of maturity date. A company with financial challenges looming in the longer-term horizon may be downgraded, but still have more than enough cash on hand to unquestionably cover its debt repayments over the next several years. Thoughtful bond managers can safely earn extra yield by selecting near-term bonds from issuers like these.

Low Expenses Are Critical

With performance in bonds measured in "basis points," or hundredths of a percent, expenses matter in this asset class more than in any other category. If a careful manager picks up .50% - .75% in extra return by taking thoughtful risks, they can easily erode that performance by operating with high expenses. The average expense ratio for the average bond manager is .78%⁷. In our opinion, this is too high a fee level relative to the performance potential. Paracle selects bond managers with fees in the lowest quartile of all managers. The bond managers that we utilize have average fees of .18%, which is 75% lower than the industry average.



Source: Morningstar Direct — — — Index return

Bringing it All Together

Bonds may be boring to talk about at parties, but so are insurance policies. However, both are critical components of a well-structured financial strategy. Moreover, even in a mundane asset class such as bonds, nuances and opportunities abound, and a penny saved is still a penny earned. As in all areas of the portfolio, Paracle seeks to be thoughtful and thorough. When we structure your bond portfolio we seek safe ways to increase your income while still adhering to our primary objective of protecting 10 years of your cash needs.

Sources:

1. Morningstar Direct. Indices: Bloomberg Barclays U.S. Aggregate Total Return, Bloomberg Barclays U.S. Aggregate Price Return
2. Morningstar Direct. Maximum drawdown and recovery data points.
3. PIMCO
4. Morningstar Direct. Indices: Bloomberg Barclays Municipal AAA, Bloomberg Barclays Municipal A.
5. Moody's Investor Service. "U.S. Municipal Bond Defaults and Recoveries, 1970-2015." 31 May 2016
6. Morningstar Direct. Indices: Bloomberg Barclays U.S. Credit AAA, Bloomberg Barclays U.S. Credit A.
7. Morningstar Direct. Category: U.S. Fund Intermediate Term Bond

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