

The background of the slide is a night sky filled with stars, with a prominent mountain peak silhouette in the foreground. The sky transitions from a deep blue at the top to a warm orange glow near the horizon, suggesting a sunset or sunrise. The mountain peak is dark and jagged, standing out against the lighter sky.

vista.

The Stability of Bonds

Intro

We have been receiving a lot of questions about the behavior of bonds when interest rates rise and what that behavior means for your portfolio's returns. This piece will address how bonds work, the effects on returns when interest rates change, and the differences between holding bonds directly compared to holding them inside mutual funds.

Bonding

Let's start with an example.

Let's say that the City of San Francisco wants to construct some new schools. Their typical fundraising would come through the issuance of bonds. Let's say you buy one of these \$10,000 bonds and it happens to be due in 10 years (August, 2028) and has a coupon of 5%. Why 5%? That is simply the coupon rate that most investors prefer, so municipalities tend to issue bonds at that rate.

Since rates are currently closer to 3%, you're going to pay more than \$10,000 because the bond is going to pay you 5%. Using bond math, this translates to a purchase price of about \$13,000.

For the next 10 years, you're going to receive 5% of \$10,000, or \$500 each year of interest (paid at \$250 every six months) and at the end of 10 years, you will receive the maturity value of \$10,000.



Bouts With Bonds

What happens to your bond as time passes?

Since most bonds are issued with a fixed interest payment (in this case 5% or \$500 of interest per year), the value of the bond will change when interest rates move.

For example, if interest rates suddenly went up by 1% the value of your bond would drop by about 8%. So, the bond you paid \$13,000 for would be worth about \$12,000. On the other hand, if interest rates dropped by 1%, your bond's value would increase by about 8% and be worth about \$14,000. If you wanted to sell the bond after one of these interest rate changes, you would either lose or gain money.

However, what if you didn't sell the bond and instead waited until it matured? Then, you wouldn't lose or gain money due to changes in interest rates. You would still get your 10 years of interest payments (\$500 per year) and you would still get the maturity value of \$10,000.

This creates a much different way of thinking about the values of bonds you see on your statements, especially when compared to the values you see for stocks. When a stock's price drops in value, there is always a chance that it will never recover or take a very long time to do so. When a bond drops in value, there is a high probability that you will still get all of the money you were planning to get when you first purchased the bond (interest and eventually principal), even though its quoted value is lower or higher. This is a little like trimming a plant in your garden because even though you trim it, it tends to grow back. The same is true for bonds when



rates go up. Even though the bond's value has dropped on the open market, you still have a high probability that you will receive the maturity value (here \$10,000).

The fact that you are highly likely to receive the maturity value of a bond is one reason that they add stability to an investment portfolio. The other reason is that price volatility of bonds is usually lower because interest rates usually change in small increments.

Let's be clear about one item here, though. When you buy a bond, you do lock in an interest rate, or yield, on that bond. In our example we locked in a yield of 3%, which is approximately the current interest rate of a municipal bond with a 10 year maturity. Interest rates may go up during the 10-year period to maturity, but your interest payments (the \$500 per year) won't change. If rates went up to 4%, we would call that 1% interest difference "foregone interest". This is the risk we run when rates are going up: we may lose out on higher interest income if rates rise and stay higher. We deal with this risk in two ways:

- Most bond portfolios have at least 10-20 bond issues, each of which matures at a different time. In the simplest structure, we might have 20 bonds with one bond maturing every 6 months for the next 10 years. This structure allows us to reinvest the matured proceeds of a bond every 6 months at the current, perhaps higher, yield.
- When we believe that interest rates are going to be going up for a long period of time, we tend to keep maturities shorter in order to minimize the foregone interest risk. This is not to say that we can predict interest rates: nobody can do that consistently over long periods of time. However, because we look to our bond portfolios as the safe bedrock of your investments, we do tend to manage them conservatively, which means keeping maturities relatively shorter when interest rates are generally believed to be increasing over long time periods.

Funds with Bonds

Most Vista portfolios contain bond mutual funds.

They are an inexpensive and efficient way to gain access to this important asset class. We also use individually-managed bond portfolios for clients with a large enough allocation to achieve proper diversification (which is usually at least about 20 different bond issues).

Our example so far has focused on holding individual bonds. What's different when we hold bonds in bond mutual funds? Since a mutual fund typically holds hundreds of bonds, each having a different maturity and yield, the value of the mutual fund is going to fluctuate according to the characteristics of the bonds that it holds. For example, if we hold a mutual fund that only has our 10-year 3% bond, the value of that fund will change just like the value of the bond would change if we held it individually. And, if we decided to sell that mutual fund after interest rates go up, we could lose money on our investment. The same changes in values happen when interest rates fluctuate, whether the bonds are held individually or in a mutual fund.

However, mutual funds hold a lot more than 20 bonds. One of the funds in many Vista portfolios is the Dodge & Cox Income Fund. At the time of this writing, that fund held over 1,000 different bond positions valued at about \$56 billion. Those bonds are like all the others in that their values change



when interest rates change. If you sell the fund after rates have increased, you could incur a loss. Mutual funds, though, have an advantage over a portfolio of individual bonds, which is that they have bonds maturing every month, perhaps every week. As the bonds mature, the proceeds are quickly reinvested at the current interest rate. This means that the yield of a bond mutual fund will usually react more quickly than a portfolio of individual bonds as interest rates change.

Relative Bonds

Bonds have two sources of positive returns: interest payments and price appreciation (when interest rates drop).

By far, the most important return source is interest payments. As the chart shows, when looking at the most common bond benchmark, the Barclays U.S. Bond Aggregate, 95% of bond returns since 1987 have been from interest payments and only 5% of returns have come from appreciation. That period included both rising and falling interest rates. And even in the last 10 years, which included some drastic reductions in interest rates due to the financial crisis, over 90% of bond returns were from interest received rather than gains generated by falling interest rates. Taking a long-term perspective, the main attribute of this asset class is the consistent payouts of interest that drive performance and make it more obvious why the stability of bonds should be included in most portfolios.



When we buy stocks we're looking for appreciation, while when we buy bonds we're looking for stability. Too much in stocks generally leads to too much volatility in a portfolio and too much in bonds can lead to inadequate growth. The proper mix in a portfolio is important because most people need a mixture of both. This is the reason that we tend to frequently revisit your planning and investment allocations. By keeping our continuous dialogue about your financial plans we can determine and fine tune what your portfolio should look like in order to help achieve your financial goals.

Thanks

We hope this this sheds a little more light on our thinking about bonds and how they fit into our portfolios.

Thank you for the trust you've placed in Vista, and we look forward to hearing from you.

Your Vista Wealth Management Team

Important Disclosure Information

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