

Bond Investment Strategies and the Fear of Inflation

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May 22, 2012

Conclusions and Take Aways

Don't fear inflation if you have a bond ladder in place that is composed of individual bonds. If you have a bond ladder, rising interest rates are your upside case because you can reinvest your maturing bonds and interest payments at a higher rate of return!

Focus on cash flow, not the daily mark-to-market gains and losses shown in your bond portfolio statement. Cash flow is the key to investment success and the most important measure of financial independence for individual investors.

If you don't have a bond ladder of individual bonds in place, design it and implement it now. Don't sit on your cash and hope you can figure out when interest rates will rise.

Discussion

Inflation Risk

The media warns investors not to buy bonds because inflation is coming, interest rates will rise and the value of bonds will fall. The brokerage houses mark to market your bond portfolio every day, creating an awareness of portfolio valuation in the hopes that you will trade to take gains and sell losses. Depending upon a number of factors, including the frequency a particular bond has recently traded, these valuations may be more or less accurate. In the trading process, you incur substantial costs and the brokers make money. You may or may not make any money. In fact, there have been numerous studies showing that if you trade you lose money. Daniel Kahneman, the 2002 winner of the Nobel Prize for economics, states that "Many individual investors lose consistently by trading, an achievement that a dart-throwing chimp could not match."ⁱ

Importance of Cash Flow

From our perspective, cash flow, not trading gains and losses, is the key consideration for individual investors. However, focusing on cash flow instead of gains and losses requires concentration because it is a different gauge of success than normally employed. Cash flow will not start an exciting conversation at a party. Using cash flow as a measure, sitting in cash waiting for interest rates to go up is not a sensible strategy unless you can correctly forecast that interest rates will go up very soon. If your prognostication is incorrect you will lose a great deal of cash flow investing at near zero interest rates in short-term or money market instruments in today's market.

Inflation is the Upside Case!

This is how we think about inflation – and we think about it a lot. For people with bond ladders of individual bonds currently in place, inflation resulting in rising interest rates, is the upside case because you can reinvest your maturing bonds and interest payments at a higher

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rate of return. We ask: "Would you rather reinvest your interest payments and principal at 4% or 6%?" You increase your return by 50% if interest rates were to rise from 4% to 6% over time. If you have a bond ladder in place, every day the maturity of your entire bond portfolio shortens by one day. As you may have noticed, that adds up!

If interest rates are rising, will the market value of your bonds decline? Yes, they will. However, if you can hold to maturity then your bonds will pay off at their face value. And remember, you are buying the bonds for cash flow, not trading when interest rates go up or down. Your cash flow from your portfolio of individual bonds doesn't change when interest rates fluctuate.

We Recommend Premium Bonds

If you purchase premium bonds (bonds purchased at a price that is above their face value), they hold their value better in a rising interest rate scenario. The higher coupon rate that is the essence of premium bonds means that you receive a return of a portion of your principal with each interest payment. In this way, an investor in premium bonds will recoup the amount they paid in excess of par via the higher coupon payments. The technical term for this is *amortization*, the return of both principal and interest at the same time. This higher cash flow will enable you to reinvest more money at a higher interest rate if interest rates rise.

Investors who are seeking a pure interest stream to provide a cash flow in lieu of a paycheck tend not to like premium bonds if they want to protect their principal. It may be difficult to figure out how much is a return of principal and how much is interest, though you can make a rough guess by multiplying your average yield to maturity times the face value of the bonds. So, for example, if your yield-to-worst call is 3 percent and your face value is \$1,000,000, then you can assume that your interest payment total is \$30,000 though the cash flow may be much higher if you purchased premium bonds. If you consume some of the principal along with the interest, then the bond functions more like an annuity. In an annuity, you are provided with a higher income stream because you are consuming some of your principal and making the insurance company your heir for the remainder of your unconsumed assets.

One of the advantages of premium bonds in a declining interest rate environment is that the bonds rapidly appreciate. This is especially so if the issuer pre-refunds the bonds; i.e. sets aside funds in an escrow account to pay all interest and principal until the first call date. In effect, the bonds will now be redeemed on that first call date. This can result in significant and immediate appreciation - and the possibility of a capital gain if you chose to sell.

Take for example Ohio State Water Development bonds for clean drinking water. They have a 5 percent coupon and had a final maturity of 2026 until they were pre-refunded to their first call date in 2018. In April 2012, the bonds' price was 123.074 or \$1,230.74 for each \$1,000 of face value. If the bonds were sold at that price, the yield-to-maturity would be 1.089 percent.

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This means that if you did not own this bond but were to buy this bond currently at this price, the yield-to-maturity that you would earn is 1.089 percent. On first look, it appeared that we should recommend selling these bonds and take the gain. On second thought, there were other considerations to think about. First, the bonds were paying a cash flow of 5 percent, not easy to reproduce in today's market. Second, we may be at an interest rate bottom. We don't know what will happen, but if we were to reinvest the gains in new bonds, the maturity date would have to be around 20 years to get an adequate return. Interest rates might rise in the next six years when the bonds were to mature. We decided we would rather have the higher cash flow and the principal back from the bonds for reinvestment at the hoped for higher rates than have a current gain. We felt that long term rates are not sufficiently attractive for this trade because the yield curve is not steep enough; i.e. long-term rates need to be around 300 basis points more than the selling yield (in this case 1.089 percent) to make the trade sensible after taking into account the tax payable on the gain.

We did take the opportunity to sell less credit worthy bonds. Due to their high coupons and the market hunger for high yields, their prices were also up. We sold Buckeye Ohio Tobaccos Settlement Financing bonds rated B3 by Moody's and B- by Standard and Poors for \$755 per bond. Considering that the bonds may pay \$0.20 on the dollar if they defaulted, we were very pleased not to have to take that risk. This is an ideal time to sell low rated junk bonds at a good price and to protect your capital.

The Cost of Waiting

Keep in mind that there is a cost associated with waiting to invest that should be factored into your investment process. Five years ago, advisors, who believed that interest rates had nowhere to go but up, kept their clients' funds in 1 to 5 year bond ladders. Five years later they are still waiting for inflation and rising interest rates to bail them out. Instead of having cash flow between 4 and 5 percent, which was available to them in bonds at the time, they had to accept a very low rate of return while they were waiting. The money invested earned less than 1% for 5 years. It will take many years, if ever, to recoup those lost cash flow payments. You might read our article posted on our website, www.allbondportfolios.com, entitled "The Short-term Road to Long-Term Failure" published by *AdvisorPerspectives*, an e-publication for advisors, where we discuss this subject in some detail.

Building a Ladder in a Low Interest Rate Environment

If you don't have a bond ladder and you wish to start one, you may, at first, be discouraged by the low yields on bonds coming due within ten years. After all, advisors recommend ladders that are usually five to ten years in length. That means that your longest maturity would be in the year 2022, and your average yield would be about 1 percent. Because most advisors are afraid of rising interest rates, this is what they would advise. Then they suggest market timing and selling to move assets from short or intermediate as rates rise.

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Instead, we recommend that you first think about when you will need access to your cash. You want to be sure that you have resources when you need them without having to sell into unknown market conditions.

Then, we suggest that if you can lock in 3 to 4 percent, then you are 2 to 3 percent ahead of the game. You can do that by purchasing longer-term bonds. While we prefer a ladder that targets years when you may need your funds, for college for example, or a ladder that has bonds maturing in every year, we have to deal with our current reality. Longer-term bonds pay substantially more both to the call and to maturity. They provide you with a higher cash flow to reinvest at higher rates if and when higher rates appear and more funds to live on if that is what you need. We hope that you will always have interest that you can reinvest at higher rates if and when they appear.

Also, the yield curve is not fixed, but rather fluid, so short-term and intermediate-term bond yields can rise when the Federal Reserve decides to raise interest rates, while long-term yields may fall. As the yield curve changes shape, you will have the opportunity to purchase shorter maturity bonds at higher rates, while the life span of your longer maturity bonds will decline with each passing year. No one has a crystal ball telling us when rates are going to rise. It is an unknown.

When you read that interest rates have nowhere to go but up, remember the stock market and real estate prices were inflated in Japan between 1986 and 1991, followed by a deflation of those markets and very low interest rates for a decade. Though after 2003 the markets gained some strength, they were once again pummeled by the collapse of our own real estate and stock markets. The benchmark interest rate in Japan in 1999 was 0.00 and in 2012 it again is in the same place. The average interest rate in Japan from 1972 to 2010 was 3.5 percent, with a high of 9 percent in 1973.ⁱⁱ The Bank of Japan notes that “Overseas economies on the whole still have not emerged from a deceleration phase,” and in particular, the Japanese economy “faces the critical challenge of overcoming deflation and returning to a sustainable growth path with price stability.”ⁱⁱⁱ

The Possibility of Deflation

Few commentators take into account the possibility of deflation. We are in an unwinding of the leverage that has engorged our economic system. The jobs report on May 4, 2012 stated that 115,000 new jobs were added in March, 2012, far lower than the 165,000 number the market was expecting. One reason for the poor jobs report is the unwinding of leverage. For example, states and municipalities must shed jobs and bring down those costs in order to bring their economic houses in order. Particular, they must reduce pension and health care costs that will dip into the pockets of many American workers. This is going to unfold slowly and will be a big damper on inflation.

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At the end of 2012, after our national elections, the United States Congress will have to decide whether to allow a host of tax cuts and other measures to expire, creating a fiscal drag on the economy. Retaining the tax cuts will result in a further ballooning of the national debt, and pressure to once again raise the debt ceiling. There are also planned spending cuts that are supposed to kick in around that time. Both higher taxes and already programmed spending cuts will result in a huge fiscal drag on the economy “of 3.5% to 5%,” according to David Reilly of the *Wall Street Journal* (April 9, 2012). Spending cuts at the state and local levels “would add an additional 0.5% hit.”

The European economy is in shambles. Portugal, Ireland, Italy, Spain, Greece and even France all have enormous debt. Surges in Spanish and Italian bond yields rock the U.S. stock market. The European banks must increase their capital requirements as outlined in Basel III. If the requirements of that summit had been in place in June, 2011 more than twenty percent of Europe’s biggest banks would have failed to meet the Tier-1 capital requirements according the European Banking Authority.^{iv} As a result, these requirements will be phased in over a number of years. All-in-all the leverage and debt must be curtailed as these economies retrench.

While there may be inflation in our future, it may not surface any time soon. There is a cost to waiting and the loss of cash flow while waiting may be substantial.

Bond Fund or Exchange Traded Fund (ETFs) Strategies

While we recommend purchasing individual bonds to build a bond ladder which will produce cash flow and a return of principal, many investors prefer to purchase bond mutual funds and ETFs. These funds are quasi-stock investments because, though they own bonds, the funds never come due. The funds must maintain the average maturity range described by their charters. The funds trade bonds and buy new ones. They pay out dividends, composed of both capital gains and interest. There are fees, costs and taxes associated with the funds or ETFs. Bond funds may purchase lower rated bonds in order to boost their yield, so they will be more attractive than their competitors. It is hard to know exactly what the quoted yields mean or if they are comparable to one another.

Also, a current significant risk is that “hot money” is ready to jump out of the funds as soon as inflation rears its head, or on any other provocation. At the end of 2010, bond funds are reported to have held \$240 billion.^v With predictions of widespread muni defaults, \$50 billion gushed out of the muni bond funds in early 2011, only to seap back to \$210 billion by March 2011 when it appeared that the predictions were overblown.^{vi} Then, contrary to the pundits’ predictions that interest rates could only go up and their prices down, municipal bond prices rose along with Treasury bonds, returning 10.7 percent total return.^{vii} This attracted even more money because investors like to go with winning portfolios, even though it often is the losing

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portfolios that are poised to gain when the tide changes. Institutional investors are closely tracking the ebb and flow of muni mutual funds, while you as an individual investor will get that information only after the fact.

Moves such as these can result in losses and/or short or long-term capital gains taxes. In order to meet redemptions, the funds must sell their best bonds to get the best prices. That can reduce the credit quality of the funds if they must sell quickly. The individual investor notoriously mistimes buys and sells, as we said at the outset.

With ETFs specifically, there are additional concerns. It is not so easy to replicate a bond index because some bonds do not trade at all and others are thinly traded.^{viii} Since the ETF cannot purchase all the bonds in the Index, the ETFs must resort to 'sampling' the bonds held in the index. As a result, they may not accurately track the index, if there is one at all. Hence, there may be tracking errors. The tracking errors have been reported to be as wide as 3 percent on some funds, while Morningstar has reported tracking errors of between 1 to 2 percent.^{ix} Another problem is that most ETFs use a market cap weighting method, "which means that companies that issue the most debt are the largest parts of the index."^x Having the most debt does not mean that you are likely to have the best credit reports.

Our Personal Investment Strategy

We are buying individual tax-free municipal bonds for our personal accounts as our cash flow becomes available. We are not sitting on cash to earn less than 1%. With each investment we have been making a minimum of 3+ percent if the bonds are called at their first call date and 4+ percent if the bonds are not called. Can interest rates move lower? We are sure that they can.

We will not lose any principal through bad timing because we intend to hold our bonds until their maturity date. Every year our bonds are one year closer to maturity. Our longer maturity bonds gradually become intermediate bonds, and the intermediate ones become short. Unlike the bond funds that must keep the bonds in the fund within a specified maturity range, individual bonds shift their place in the yield curve.

We will not pay any Federal income taxes on our tax-free municipal bonds during the period the bonds are outstanding. We will not worry that our bonds might default because they are all high quality bonds. We will reinvest the cash flow at the current market rates. We will track our cash flow and continue to add to it. This is what we recommend to our clients. This simple strategy will result in the growth of bond portfolios as a result of compounding of interest and the preservation of principal. It may even result in financial independence.

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ⁱ Daniel Kahneman. *Thinking, Fast and Slow*. Farrar, Straus & Giroux, 2011. P. 213.

ⁱⁱ Bank of Japan. "Japanese Interest Rate," www.tradingeconomics.com/japan/interest-rate.

ⁱⁱⁱ Bank of Japan. "Bank of Japan Holds Off Easing Measures," www.tradingeconomics.com. April 10, 2012.

^{iv} Ben Moshinsky and Jim Brunsten. "European Bank Stress Tests Need Rethink, Elderfield Says," *Bloomberg* April 4, 2012.

^v James Ramage. "Ebb and Flow of Muni Mutual Funds Has Outsized Impact on Market," *The Bond Buyer*, April 12, 2012.

^{vi} James Ramage, April 12, 2012.

^{vii} James Ramage. "More Moms and Pops Turn to Municipal Bonds Funds," *The Bond Buyer*, April 24, 2012.

^{viii} Jason Kephart. "Getting a look under the fixed-income ETF hood." *InvestmentNews*, February 20, 2012.

^{ix} Jason Kephart citing Morningstar.

^x Jason Kephart