## MuhlenkampMethods For the Intelligent Investor

## Beware of Good Yields

This essay was originally published in Muhlenkamp Memorandum Issue 26, April 1993. Investors had just come through a period when many of the risks of fixed-income securities had become apparent, but this did not stop them from continuing to look for high yields in fixed-income securities. This essay explains the yields and risks of fixedincome securities so that investors can know what to expect and what to watch out for. Remember, if it seems too good to be true, it probably is. Look for the hidden risks.

Recently, the American investing public has learned several lessons in fixed-income investing. The first was the lesson of bankruptcy risk. Several years ago when CD and money market yields fell from $12 \%$ to $8 \%$, much of the investing public (in an effort to maintain "income") went shopping for highyield securities. The financial community, from banks to savings and loans to brokers, responded with various programs and securities that promised high yields. Investors later learned that, all too often, high yields meant junk because the assets behind these securities were of poor quality. The recession of 199091 drove the weakest companies into bankruptcy, and default rates on junk bonds rose from $4 \%$ to $10 \%$. In addition, allegations of wrongdoing were brought against the prominent junk bond financier, Michael Milken, who subsequently pleaded guilty to security fraud in 1990. Many investors and many in the financial community said, "Never again," but it is happening again - with a twist. Today, the goal is to get $8 \%$ returns in a $3 \%$ market, but the risk in doing so has changed (more on this later).

The second lesson was reinvestment risk. Throughout the 1980s, savers were told by investment professionals that CDs were riskless, only to find interest rates on CDs dropping from $8 \%$ to $3 \%$. So when their $8 \%$ CDs matured and they wanted to reinvest that money, they found that only $3 \%$ CDs were available. Trying to predict rates is unreliable. Yet because CDs and bonds have fixed maturity dates, they require an investor to try to do just that. (To minimize risk for themselves, the issuers have created "callable" CDs and bonds, but investors face penalties if they want to cash in early.)

The third lesson was that international money market funds have currency risk. Since September 1992, the U.S. dollar has risen, and many investors in international money market funds have seen their principal shrink by $15 \%-20 \%$. Why? Let's use an example. Let's say you buy a 100 -yen bond when the
exchange rate between U.S. dollars and the yen is $1: 1$. You spend $\$ 100$ U.S. for a 100 -yen bond. Then the dollar appreciates, and now 100 yen is only worth $\$ 80$ U.S. If you sell that 100 -yen bond, you will get 100 yen, which is worth $\$ 80$ U.S. Your principal shrank $20 \%$ in U.S. dollars. So remember, if you own foreign bonds and the dollar appreciates against the currency of your bonds, you will receive fewer dollars per currencies when you sell. As an investor, you'd rather own foreign currency and foreign bonds during a time when the dollar is falling relative to foreign currency. Like many of the characteristics of bonds, this is counterintuitive for most people.

We believe that the public is about to learn another lesson in fixed-income investing-the risk of callability on corporate and municipal bonds and on corporate preferred stocks. Once again, the investing public is looking for "high yields." During the junk bond craze of the late 1980s, the primary risk on most corporate high-yield securities was corporate bankruptcy. High-yield securities were issued by companies with weak balance sheets at a time when the Federal Reserve System was squeezing the money supply and the economy was slowing down, making bankruptcy more likely.

Today (1993), bankruptcy risk among the issuers of high-yield securities is lower for four reasons:

1. The Federal Reserve is expanding the money supply.
2. The economy is expanding.
3. The current lower interest rates benefit big borrowers the most.
4. Investors and underwriters are very sensitive to the risk of bankruptcy.

What many investors don't realize is that the decline in interest rates that has lessened bankruptcy risk has also increased the number of bonds selling at premium prices and the risk of callability.

Figure 6.3 is a small section of a table that appears in The Wall Street Journal every day ${ }^{1}$ under the heading of Treasury Bonds, Notes \& Bills. The table lists the Treasury bonds currently outstanding along with the latest Bid and Asked Prices. The final column gives the yield-to-maturity based on the Asked Price. The yield-to-maturity is the total return (annualized) if the bond were bought today at the Asked Price and held to maturity.

Thus, if you buy a $71 / 4 \%$ U.S. Treasury that matures in May 2016, you can expect to pay 104 cents on the dollar. From now to May 2016, you will receive interest payments of $\$ 7.25$ per hundred ( $71 / 4 \%$ ) each year; and in May 2016, you will receive the bond principal of 100 cents on the dollar. Therefore, you will have a guaranteed loss of 4 cents on the dollar of principal.

The final column shows that although the interest payment is $71 / 4 \%$, once you adjust for the loss of principal the annualized yield-to-maturity on the Asked Price is $6.82 \%$.

Most of us wouldn't worry too much about losing $4 \%$ of principal over 23 years; but let's look at the $11 \frac{1}{4} \%$ Treasury bond of February 2015. To get an $\$ 11.25$ interest payment each year would cost 151 cents on the dollar. Thus, we would receive a current yield of $\$ 11.25 / 151=7.5 \%$; but when the bond matures in February 2015, we won't receive the 151 -cent cost. We will only receive the 100 -cent par value, a loss of principal of 51 cents-guaranteed.

The final column shows that although the interest payment is $11.25 \%$, once you adjust for paying $151 \%$ of par and losing that principal, the annualized yield-to-maturity on the Asked Price is $6.74 \%$. In effect, the market price of the two bonds has been adjusted so that the expected return on the $7.25 \%$ and the $11.25 \%$ bonds are nearly the same.

Figure 6.3 Treasury Bonds, Notes, and Bills

| Maturity <br> Rate | Mo/Yr | Bid | Asked | Ask <br> Chg | Yld |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 11.250 | Feb 15 | $151: 01$ | $151: 03$ | -11 | 6.74 |
| 10.625 | Aug 15 | $144: 05$ | $144: 05$ | -9 | 6.76 |
| 9.875 | Nov 15 | $135: 15$ | $135: 15$ | -11 | 6.78 |
| 9.250 | Feb 16 | $128: 08$ | $128: 08$ | -8 | 6.80 |
| 7.250 | May 16 | $104: 30$ | $104: 30$ | -9 | 6.82 |

[^0]If you scan the full table, you will see that, with a few special exceptions, the market has adjusted prices of all Treasury bonds so that the yield-to-maturity numbers are merely a function of time-tomaturity.

When you consider non-Treasury, fixed-income securities, you find a further complication because most corporate and municipal bonds and corporate-preferred stocks are callable. Just as you and I can pay off or refinance our home mortgages when we choose to do so, with little or no penalty, corporations and municipalities can pay off (or "call in") their bonds or preferreds when they choose to do so.

The following is a recent example that crossed my desk. In 1990, a local company, in need of equity capital, marketed a preferred stock to the public. The preferred paid an annual dividend of $\$ 2.60$, and the stock was sold at $\$ 25$ for a yield of $10.4 \%$. Sounds good, right?

It is good enough that since 1990, the market price of the preferred has been bid up to 29.50. (Note that at 29.50, the current yield on this preferred is $\$ 2.60 / 29.5=8.8 \%$.) Still good, right?

Yes, but if you read the prospectus on this preferred stock, you learn that the company can call it back in 1995 at $\$ 26.30$ per share. Should the company not call in this preferred, its annual cost will be 9.9\%.

Thus, if today's rates hold, it is likely the company will call in this preferred issue, and the current holder will lose $11 \%$ in principal ( $\$ 29.50$ to $\$ 26.30$ ) in the next two years. When combined with the dividends received over these two years, the investor's "yield-to-call" or total return over that two years is $3.5 \%$ per year, which is to say the return is comparable to other securities maturing in two years.

The accompanying Treasury Yield Curve is also printed in The Wall Street Journal every day. ${ }^{1}$ It is simply a plot of the yield-to-maturity rate from the Treasury Bonds, Notes \& Bills table excerpted earlier. As a rule of thumb, any security that seems to provide a yield of more than $1 \%$ above this curve (at the appropriate time span) carries a risk that you haven't been told about.

Be careful out there!

Figure 6.4 Treasury Yield Curve


## Editor's Note

Remember that bonds are traded in an open market, just like stocks. Therefore, they are subject to the influences of the market. With this in mind, let's take one more look at bonds. Since the coupon (the rate) of a bond is fixed, when interest rates are rising, the bond becomes less attractive to investors (they can get better rates elsewhere) and the price of the bond will fall.(This is what happened in the 1970s.) When interest rates are falling, the fixed rate of the bond makes it more attractive to investors and bond prices rise, but only until they reach a price at which they are callable. Then, the bond will be called because the company that issued the bond will want to refinance their debt at the lower rates that are now available. So no matter if interest rates are rising or falling, the bondholder faces significant risks. If this seems one-sided, consider this: In the bond market, the borrower issues the bonds, and therefore writes the rules. Consequently, bonds are designed to make money for the borrower, not the lender. Buyer beware!


[^0]:    ${ }^{1}$ No longer included in The Wall Street Journal every day, but is currently in Barron's every week.

