

The Fundamentals of Fixed-Income Investing

Volume 1
Number 238

From the
T. Rowe Price
Information
Library

When it comes to making investment decisions, stocks often grab the lion's share of our attention. Fixed-income securities—which may seem less complex or risky—are often selected more hastily, perhaps on the sole basis of yield. But bonds are a critical and diverse feature of the investment markets, and well-chosen bonds should play a fundamental role in the portfolios of many investors. If you're considering investing in bonds, you'll need to understand what fixed-income securities are and how they work. You will also need to understand how to appropriately use them in a portfolio designed to meet your financial goals.

What are fixed-income securities?

Bonds are loans you make to the corporation or governmental entity that issues them. In return for your assets, most bonds and other debt securities pay a fixed dollar amount of interest at regular intervals until the date they mature, at which time their principal (face value) is repaid. The annual dollar amount is found by multiplying the fixed coupon (interest) rate by the security's face or par value, usually \$1,000. Thus, a bond with a 5% coupon rate will pay \$50 of interest each year.

The fixed-income market is diverse, covering a wide maturity range (from money market instruments maturing in less than one year to long-term bonds maturing in 30 years or more) and credit range (from high-quality U.S. Treasury securities to high-yield "junk" bonds, whose issuers might miss their interest payments). Between these extremes in credit quality are mortgage- and asset-backed securities and investment-grade corporate bonds, which provide higher income and have more credit risk than Treasuries, and tax-free municipal bonds, whose income payments are exempt from federal and, in some cases, state taxes.

Features of fixed-income securities

- *The Coupon Rate.* Coupon rates usually vary directly with a bond's maturity (the longer the maturity, the higher the rate) and inversely with the issuer's creditworthiness at the time of issuance (the higher the quality, the lower the rate). U.S. Treasury securities have the lowest coupon rates because the federal government—as the only entity that can print money—is the nation's most creditworthy borrower.
- *Coupon vs. Yield.* Although a bond's coupon rate is usually fixed, its price and yield will vary with fluctuations in general interest rate levels, credit ratings, and demand/supply conditions. Returning to the previous example, an investor who bought a 5% \$1,000 par value bond at a price of \$900 would realize a current yield of 5.6% (\$50 divided by \$900 = 5.6%). If the bond had been priced at a premium to par, say \$1,100, the yield to the investor would have been 4.5% (\$50 divided by \$1,100 = 4.5%).



Table I: Change in Principal Values of Bonds as Interest Rates Rise or Fall

Bond Maturity in Years	Rates Rise 1%	Rates Fall 1%
1	\$990.57	\$1,009.62
3	\$973.27	\$1,027.75
5	\$957.88	\$1,044.52
10	\$926.40	\$1,081.11
30	\$862.35	\$1,172.92

Chart assumes a 5% coupon and \$1,000 par value for each bond and shows value changes apart from fluctuations caused by other market conditions or factors.

■ **Yield vs. Total Return.** Many investors focus only on the current yield offered on debt securities. This is a mistake because the total return is a truer representation of the value of a fixed-income investment. Total return depends on another important component—appreciation or depreciation. For example, a bond that paid a 5% coupon rate for a particular year and also rose 1.5% in price would post a total annual return of 6.5%. A 1.5% price decline would have reduced the total return to 3.5%.

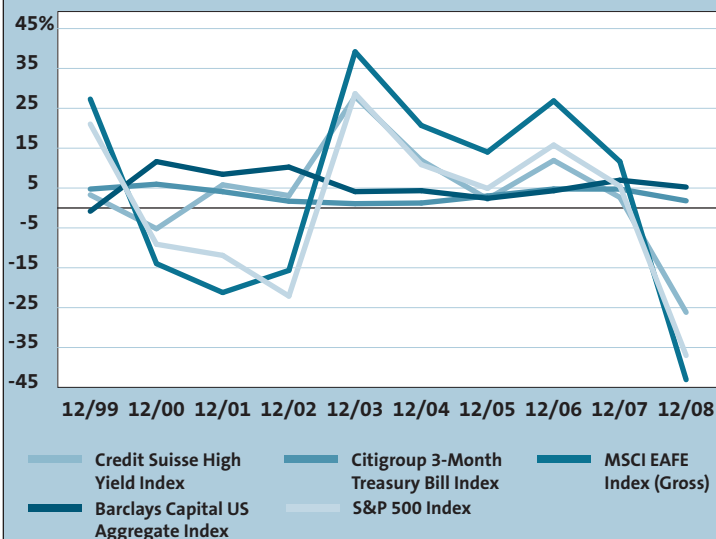
Generally, prices of longer-maturity bonds fluctuate more in response to changes in interest rates than those with shorter maturities. This is one of several risks associated with bond investing:

■ **Interest Rate Risk.** If interest rates rise after you purchase a fixed-income security, the bond's price will decline. By the same token, a decline in interest rates raises bond prices, which can boost your total return. Of course, these are only paper gains or losses unless the bond is sold before it matures.

A quick way to gauge a bond or bond fund's potential for price fluctuations is to look at its duration, which is a more accurate measure of a fund's interest rate sensitivity than maturity. Multiplying the duration by the expected change in interest rates tells you approximately how much that security's price will change. For example, a bond with a four-year duration means that its price would decline about 4% for every one-percentage-point increase in rates, and vice versa.

■ **Credit Risk.** Yields reflect a borrower's credit quality as well as the instrument's maturity. Lower-quality (noninvestment-grade or high-yield) bonds—those rated BB or below—generally offer higher yields than better-quality issues, but may be more volatile. The higher yield compensates you for lending money to a company that is considered more likely to default (not make timely interest or principal payments). Thus, a rising yield (and falling price) on a bond may reflect a company's deteriorating financial situation rather than any overall rise in interest rate levels. Conversely, when a company's financial situation improves, the yields on its obligations should decline.

Table II: Fixed-Income Volatility in Perspective For the period ended 12/31/08



Note: Lehman Brothers U.S. Aggregate Index is now Barclays Capital U.S. Aggregate Index.

Highest and lowest returns over the past decade indicate the potential for risk for a variety of fixed-income securities as well as other investment options.

Fixed-income securities and your portfolio

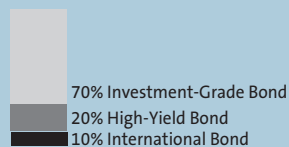
Mary J. Miller, director of T. Rowe Price's Fixed Income Division, notes: "Many investors appreciate the important role fixed-income holdings can play in their investment portfolios. They know these holdings not only generate income, but they also can reduce the portfolio's overall volatility with only a moderate sacrifice in total return."

In a well-allocated portfolio, the allocation of bonds, equities, and short-term investments will change over time depending on how long you have to invest for your goal; visit troweprice.com for more information. However, within the fixed-income allotment of a well-diversified portfolio, 70% might be in investment-grade bonds, 20% in high-yield bonds, and 10% in international bonds. (Diversification cannot assure a profit or protect against loss in a declining market.)

You may be able to enhance your diversification and manage your business and sector risk by investing in fixed-income mutual funds as opposed to individual securities. Bond funds are a little unusual in that, unlike most bonds, they don't have either a fixed coupon or maturity date. However, funds are far easier to move money into and out of. Most fixed-income instruments trade in large blocks: for example, \$5,000 for municipal bonds or \$25,000 for Ginnie Maes (GNMAs). Mutual funds allow you to invest in a broad portfolio of securities with a low minimum investment. They also offer professional research and portfolio management, often at low cost.

Before selecting an investment, you should also determine whether tax-free municipal bonds would be more advantageous to you than taxable bonds; see the "Investing in High-Yield Municipal Bonds" Insights report for more details.

**Chart I: Suggested Portfolio
Diversification—Fixed Income**



Insights reports provide background information on many aspects of investing. *Call 1-800-638-5660 to request a prospectus, which includes investment objectives, risks, fees, expenses, and other information that you should read and consider carefully before investing.* T. Rowe Price Investment Services, Inc., Distributor.



100 East Pratt St.
Baltimore, MD
21202
1-800-638-5660
troweprice.com/insights
Z10-207 4/09
82663