

INVESTMENT UPDATE

A recent letter to the editor of the popular trade publication *Pensions & Investments* gave us a good chuckle. The writer of the letter was a manager of traditional, “core” bond portfolios who was announcing, with tongue firmly in cheek, the strategy for their new “core-plus” bond strategy, “We take our core portfolios and add 10,000 shares of Apple Computer. Done!”

His point, of course, is that managers of core-plus bond portfolios, in order to add a few basis points of return to the client’s allocation to the “bond market,” add all sorts of securities to the mix.

Many of these products aren’t strictly bonds, but may be derivatives of bonds, foreign securities with currency risk, or synthetic securities. But even some of the bonds—non-investment grade, junk bonds—often are bonds in name only. We’ll attempt, in a few sentences, to explain why some bonds are little different from “10,000 shares of Apple computer.”

Corporate finance textbooks tell us that corporate treasurers have few conventional options when seeking additional capital for their firm; the company can borrow from a bank, issue bonds, or issue equity. Each has advantages and disadvantages. Borrowing from a bank is (typically) the quickest and easiest—no registration with the SEC, essentially one party to deal with, and no long road show talking up pesky investors. Unfortunately, in the modern era, banks are loath to lend money on an unsecured basis; treasurers are equally loath to pledge company assets as collateral. Issuing stock is another choice; the main negative here is that issuing additional shares of stock dilutes the ownership share of existing equity holders. The great thing about equity (at least from the issuers’ standpoint) is that it never has to be repaid—even dividends can be omitted at management’s discretion. The final choice is to issue bonds. Like bank loans, the principal has to be repaid at maturity, and interest must be paid on schedule. Unlike a loan, most bonds are unsecured, though other provisions may provide bondholders—the lenders in this case—some additional protection.

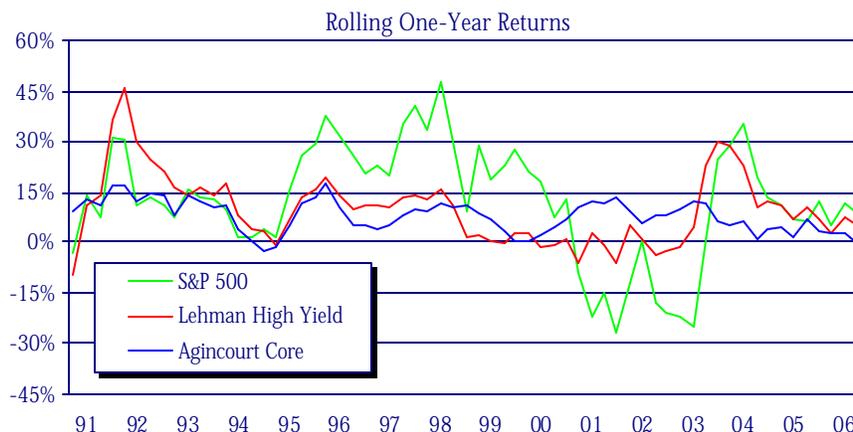
From a lender’s standpoint (both banks and bondholders), it is essential that there be significant and stable equity ownership in the firm. Just as a mortgage lender expects to see a comfortable equity stake and stable source of income on the part of the home buyer, so a bondholder demands that the bond issuer has a significant degree of both cash flow and an adequate equity base. In the case of companies with little equity ownership (i.e., a high degree of “financial leverage”), the bondholder becomes the de-facto equity owner—all the volatility of the company’s fortunes are reflected in the value of the bonds he owns. Highly levered companies are in a constant struggle to survive, even in good times, and default looms in every economic downturn.

Now we see where the letter writer to *P&I* was coming from. Practitioners of traditional bond strategies point out that core-plus bond portfolios’ reliance on low-quality bonds is tantamount

to adding equity exposure. Junk bonds, as we’ve just seen, often behave more like stocks than high quality bonds because the company’s capital structure places a higher degree of equity-like risk on the bondholder (but without the high upside return potential of stocks). Traditional bond investors sometimes derisively refer to low-quality corporate bonds as “stocks in drag”—they may look like bonds on the outside, but you may get a most unwelcome surprise.

What do historical returns tell us about the behavior of investment grade bonds relative to equities and junk bonds? Does the data support the conventional wisdom?

The chart on this page shows fifteen years of historical rolling 12-month returns for three asset categories—equities (represented by the S&P 500), junk bonds (the Lehman Brothers High Yield Bond Index) and high-grade bonds (Agincourt “Core Bond” Composite). Some observations: We can clearly see the extended and powerful bull market in the stock market throughout the second half of the 1990’s, as well as the painful collapse stock investors experienced in the 2001-2003 period. You will also note the lack of any clear period where junk bonds outperformed—while one might be tempted to



point to 1991-92, we have to keep in mind that in the three years prior to this period, high-yield bonds performed very poorly relative to both equities and high-grade bonds (recall that the high yield market in the 1980's was manipulated by the notorious Drexel Burnham Lambert). Meanwhile the high-grade bond market enjoyed a fairly long period of relatively good performance from 2001-2003, while the other two asset classes were recovering from the excesses of the 1990's.

One final, and perhaps most important observation: Notice how the returns of the Lehman High Yield Index and the S&P generally move together (although the S&P displays much higher volatility), while the Agincourt Core Bond returns seem to often move in a contrary pattern to the other two. The traditional belief that high-grade bond returns are negatively correlated with the stock market, while junk bonds are positively correlated is borne out by the data, with the relationships strengthening more recently. The correlation coefficient of

12-month returns (measured quarterly) between the S&P 500 and the Agincourt Core Composite is -0.35 over the past ten years and -0.66 over the past five years (recall that a reading of zero means no correlation, a reading of $+1.0$ means perfect correlation, and -1.0 indicates perfect negative correlation).

The modestly negative reading between stocks and high grade bonds indicates that when stocks go down, high-grade bond portfolios tend to go up (and vice-versa). Meanwhile, the correlation between the S&P 500 and the Lehman High Yield Index is strongly positive, $+0.57$ over ten years and $+0.78$ over the last five years.

This has important implications for asset allocation decisions. One of the benefits of a traditional bond portfolio is that it is a good diversifier of total portfolio risk when combined with stocks, since the two are negatively correlated over longer periods. But, as we've seen, junk bonds, because of their heavy "equity-like" characteristics, don't provide the same diversification benefits as high-grade bonds.

The main argument in favor of adding non-investment grade bonds to a traditional core bond portfolio is that junk bonds' higher yields boost the total return of a core-plus portfolio. This extra yield, the argument goes, will more than offset the near equity-like volatility that these low-quality bonds possess.

But could the writer of the letter to *P&I* be on to something—might stocks be an even better addition to a bond portfolio? What happens, in the creation of a core-plus portfolio, if instead of adding non-investment grade bonds to a core bond portfolio, we just add stocks? After all, despite their relatively poor returns over the past few years, stocks outperform bonds of all stripes over longer periods. Why not add the best performing asset class that's also highly negatively correlated?

Using the same fifteen years of quarterly returns data for these three asset classes that we employed for the chart on page one, we created two core-plus "bond" portfolios; the chart on this page shows how these simulated portfolios look in a risk-versus return framework. As it turns out, a 90%/10% blend of high-grade bonds and stocks is the clear winner, outperforming both the core portfolio and the simulated core-plus bond portfolio of 90% core bonds and 10% high yield. As the chart shows, while the volatility of returns (measured by standard deviation) of the S&P by itself is more than 50% higher than

the High Yield Index, the combination of S&P and core bonds results in lower overall volatility than core bonds alone or a combination of core and high yield bonds. In fact, every combination of high grade bonds and stocks outperforms similar mixes of high grade bonds and junk. Clearly, the high negative correlation between high grade

bonds and stocks provides benefits in addition to the normal return boost that one might expect from the stock market.

Does this mean that every bond manager in the country should plow some stocks in their bond portfolios and roll out their new "enhanced core-plus strategy?" Not exactly. It may be helpful to remember that these portfolios have been around for at least 100 years: we call them "balanced accounts," they've just typically had a lot more than 10% in stocks! What it does mean, in our opinion, is that the best way to enhance the risk-adjusted returns of a high quality bond portfolio is by having significant equity exposure as well. Adding junk bonds is an inefficient and not very effective method of boosting returns.

One last point: We don't discount the possibility that there are managers that can outperform the junk bond index. Good credit work, proper timing of turnarounds, moving across industries or up and down the ratings scale within the high yield universe—all these tools can add value if used with skill. But it's clear, at least from the past fifteen years of data, that the high yield asset class as a whole is inferior to the genuine article: good old common stocks.

