Evaluating Risk Among Fixed Income Managers

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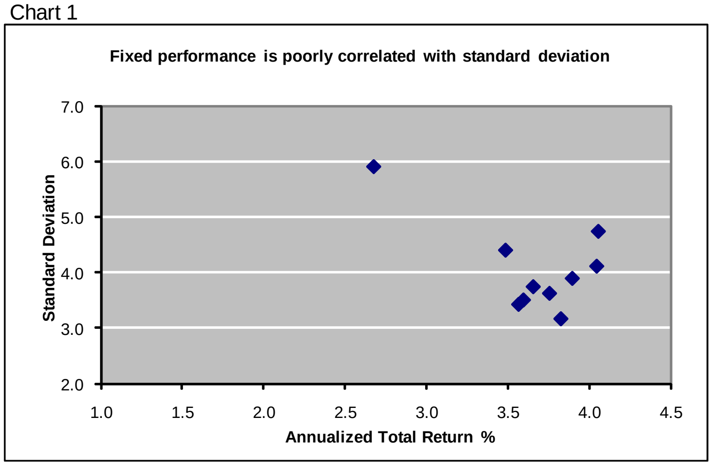
Using Just Standard Deviation Is Risky – analyzing Downside Deviation is a much more effective tool.

Today, more than ever, investors are concerned with risk. Reducing risk is a common theme and conventional wisdom states the greater the risk, the greater the potential for gain…or loss. When it comes to the fixed income market, clients tend to be even more risk adverse and less tolerant of volatility in their portfolios. After all, bonds are supposed to be less risky than most other assets.

There is, however, a disconnect between volatility and risk. In reality, volatility isn't all bad. Clients rarely complain about a manager generating more return compared to peers. Conversely, no one is happy when a manager loses too much compared to peers. To measure risk, the investment industry typically looks at standard deviation as the proper definition when comparing fixed managers. Unfortunately, this measure fails to properly quantify risk because it focuses only on fluctuation of returns – both positive and negative – and fixed income investors are more concerned about the potential for incurring loss.

To illustrate, examine Chart 1. We looked at the Core Fixed Income strategies listed in the eASE Universe sponsored by eVestment Alliance. This data represents 251 strategies and is measured over the five years ending March 31, 2009. The chart compares the annualized standard deviation of returns against total return, broken down into decile averages. As you can see below, there is very little discernable correlation between standard deviation and performance. In fact, the two highest deciles of volatility provided the lowest and highest returns respectively, with each of the other decile groups showing mixed results. In the fixed income world, using only standard deviation provides a limited description of the relationship between risk and return.

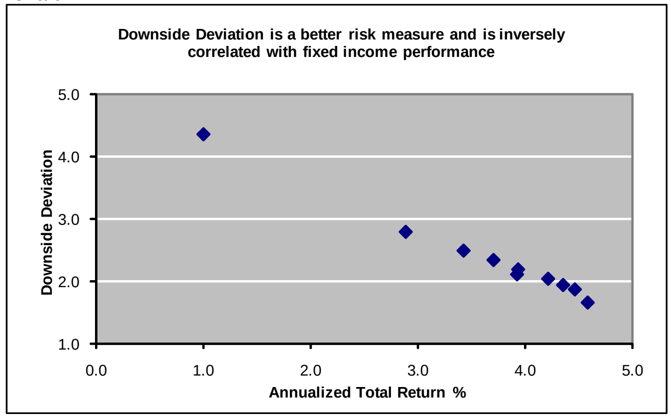
Chart 1



Source: eVestment Alliance - Core Fixed Income Universe.

A superior way to understand and analyze risk is to focus on downside volatility rather than all volatility. That is, isolating the negative portion of risk to determine if there is a better way to evaluate fixed income managers. Two industry measures that effectively accomplish this are **Downside Deviation** and the **Sortino Ratio** (as opposed to the Sharpe Ratio).

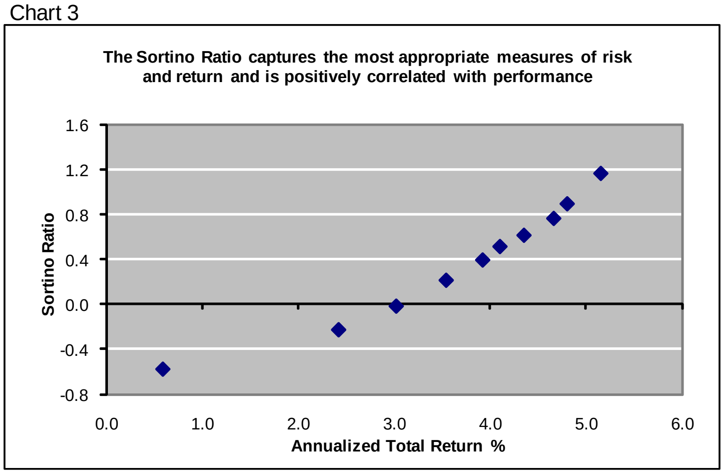
Chart 2



Source: eVestment Alliance - Core Fixed Income Universe.

Downside Deviation measures volatility that is negative (true risk) by calculating the standard deviation of only returns that are less than the mean. The lower this measure, the lower the potential for loss from taking normal investment risk. Chart 2 uses the same eVestment Alliance data of Core Fixed managers and compares the downside deviation of returns against total return by decile average. As you can see from this chart there is a distinct inverse correlation between downside risk and performance. Managers in the lowest decile of this risk measure provided the highest return and each decile average with a higher downside deviation provided sequentially lower results. The downside deviation is simply a better risk measure to evaluate fixed income managers.

Chart 3



Source: eVestment Alliance - Core Fixed Income Universe.

The Sortino Ratio is a good tool to capture both risk and return in an appropriate manner, measuring return relative to negative volatility. It is essentially a derivation of the Sharpe Ratio, replacing all volatility (standard deviation) with only bad volatility (downside risk). The higher this ratio, the lower the risk of incurring large losses. Again, using the same data, Chart 3 reveals a near perfect correlation between the Sortino Ratio and performance.

All three of these statistics focus on fixed income investors biggest fear, volatility. However, using just standard deviation to compare managers rarely tells the whole story. By adding Downside Risk and the Sortino Ratio to your analysis, you will eliminate the bad volatility and be left with a list of bond managers who did not surprise investors during difficult markets.

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