

How DTS Helps Us Evaluate Bonds

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Evaluating bonds and fixed income portfolios can be complex and challenging, and to help make that process easier I developed a way for Callan to use a metric developed by practitioners called DTS, or duration times spread, which measures systematic exposure to credit risk.

(Estimated reading time: 2 min 27 sec)

DTS is similar to [equity beta](#), which measures systematic risk exposure to the stock market, or [bond duration](#), which measures systematic exposure to interest rate risk. And understanding DTS is intuitive: A bond or portfolio with a DTS twice that of another bond or portfolio means it will be twice as impacted if credit spreads widen. DTS allows investors to estimate the negative percent return of any bond if its spread were to double from the current level, all other factors staying the same.

Because of its simplicity and elegance, it gives Callan a tool to compare the exposure to credit spreads of many types of bonds. In other words, it allows an “apples to apples” comparison between bonds that might actually be apples and kumquats. We can also use DTS to examine a fixed income portfolio in comparison to another portfolio.

This serves as a useful complement to the evaluation Callan already does for credit portfolios both in terms of the quantitative metrics as well as the qualitative analysis. It improves our research to produce a better picture of portfolios and potential managers. Importantly, it provides an alternative lens with which to view credit risk from that of the credit ratings agencies.

In evaluating it, we looked back at how it performed during the Global Financial Crisis and how well it stood up as a measure of risk, or volatility, during that period of time. We also tested our ability to retrieve the necessary data from active asset managers. Finally we analyzed the data when it came in and how it helped us get a better picture of what managers were actually doing with their portfolios, which is especially helpful in understanding whether they were maintaining a consistent style or there was some style drift in the portfolio.

DTS also potentially gives us a better way to evaluate the risk at the total portfolio level, beyond the credit sector. Using DTS in conjunction with beta, for instance, we can evaluate the combined risk of the equity and credit side of a portfolio.