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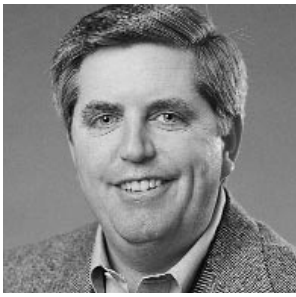

New Horizons in Bonds

Fixed income strategies reduce risk and increase returns.

Given the volatility in equity markets in the last two years, investors are re-evaluating their fixed income allocation. The benefit of including fixed income in a portfolio is demonstrated by comparing the returns of a portfolio relative to their volatility (Sharpe ratio) as the allocation shifts from stocks to bonds. For example, over the last ten years the optimal risk-adjusted allocation between stocks and bonds is 65/35 in a global portfolio and 30/70 in a U.S. portfolio, respectively.

While the risk-reducing benefit of a fixed income allocation is clear, a common complaint is that too much return is sacrificed by diversifying into this less risky asset. This need not be the case. Given the reduced risk of the diversified portfolio, an overlay strategy can be added that maintains less of a risk level than an all-stock portfolio while enhancing its return. In this way, the portfolio's risk can be reduced and return increased. For example, the S&P 500 returned 10.7 per cent with a standard deviation of 17.75 per cent for five years ending December 2001. In the same period, a portfolio consisting of 60 per cent S&P 500, 40 per cent Lehman Aggregate and an overlay of the bond allocation would have returned 12.4 per cent with a standard deviation of 13.26 per cent.

The key is identifying fixed income strategies that deliver true alpha to use in a portfolio's asset allocation mix or as a portable alpha overlay. True alpha represents the beta-adjusted excess returns of a strategy and is a better tool to identify potential investments. For example, if strategy A and strategy B both have excess returns of 30 basis points but strategy A has a beta of 1.14 vs. strategy B with a beta of 1.03, clearly strategy B is more desirable because it delivers the same excess returns with less risk. The calculated alpha for each strategy is -0.68 and +0.23, respectively.

In addition, the strategy's information ratio and market bias should be analyzed. The information ratio represents the excess returns of a strategy divided by the standard deviation of those excess returns. In this respect it represents the dispersion of the excess returns. A low dispersion of excess returns will result in a high information ratio. Finally, the excess returns should not be biased relative to market direction, credit quality or other such factors. A scatter diagram and regression of excess returns should be horizontal with a positive Y-intercept for each relevant factor.

A strategy delivering true alpha can be used as a core asset or as a portable alpha overlay. Since a strategy's total return may be viewed in terms of market return and alpha, the alpha can be isolated by subtracting the market return. The market return can be eliminated with a total return swap or a correlated basket of futures. The remaining alpha can then be added as an overlay to any portfolio to increase its return as illustrated below.

This example demonstrates how a portfolio can reduce risk and increase returns through diversification and the use of portable alpha overlays. The risk of the portfolio with overlays is significantly less than an all-stock portfolio (11.2 per cent vs. 14.02 per cent) while somewhat more than a 60/40 allocation without overlays (10.05 per cent vs. 8.82 per cent). However, the return jumps to 18.72 per cent vs. 12.94 per cent for the all-stock portfolio and 10.88 per cent for the 60/40 allocation without overlays. ▮

PORTFOLIO (JAN. 1992 - DEC. 2001)	RETURN	RISK	PORTFOLIO WEIGHT	RETURN
S&P 500 (60%)	12.94	14.02	60.0%	7.76
Lehman Aggregate (40%)	7.23	3.76	40.0%	2.89
Portable Alpha Overlay: PanAgora Cap. Rotation L/S	6.82	6.19	100.0%	6.82
PanAgora Yield Curve Portable Alpha	1.25	1.26	100.0%	1.25
			TOTAL RETURN	18.72
			TOTAL RISK	11.20